

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

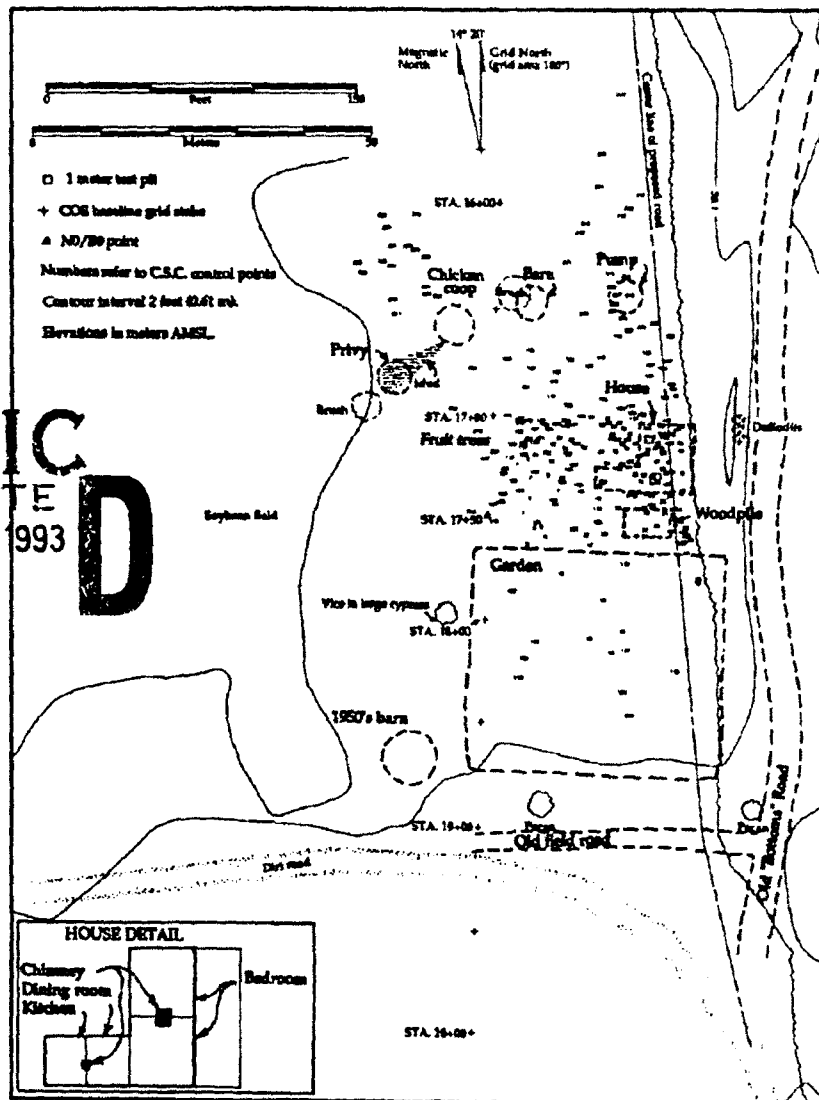
2. Once the problem is identified, the next step is to define the objectives and goals of the project. This helps to clarify what needs to be achieved and provides a clear direction for the team.

3. The third step is to develop a plan or strategy to address the problem. This involves breaking down the problem into smaller, manageable tasks and determining the resources needed to complete each task.

4. The fourth step is to implement the plan. This involves putting the strategy into action and monitoring progress regularly to ensure that the project is on track.

5. The final step is to evaluate the results of the project. This involves assessing the outcomes against the objectives and goals and identifying any areas for improvement or further action.

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# REPORT DOCUMENTATION PAGE

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ARCHAEOLOGICAL INVESTIGATIONS AT THE LEWIS SITE (3LE266):  
A TWENTIETH-CENTURY BLACK OWNED FARMSTEAD  
ON THE ST. FRANCIS FLOODWAY,  
LEE COUNTY, ARKANSAS

Submitted to:

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Memphis District, Corps of Engineers  
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## ABSTRACT

During January 1992, archaeological testing was conducted at the Lewis site (3LE266), located on the St. Francis Floodway in Lee County, Arkansas. The initial site identification had been made by Memphis District Corps of Engineers personnel. Garrow & Associates, Inc. was originally contracted to assess the eligibility status of this historic site for listing in the National Register of Historic Places through a controlled surface collection and the excavation of two 1 x 1 m test units. The presence of an intact feature in one of these units led to the expansion of the scope of work. In the interim, contact with Mr. George Lewis, a longtime resident and owner of the property, provided an excellent oral history. The oral history provides for tight chronological control, and confirmed what was strongly suggested by the site assemblage: that the site was occupied from the early portion of the twentieth century to recent times. This report contains the results of a literature and records search, testing, and artifact analysis, with interpretations of the site based on the assemblage contents. The oral history of the site as recalled by Mr. George Lewis is also presented, which provides supporting evidence for site interpretations, in addition to a wealth of knowledge concerning tenant lifeways and settlement patterns in the Cow Bayou area.

The historic component recognized at the site as an artifact scatter appears to date from the early to mid twentieth century. The site fits into a settlement pattern of black owners and tenants along the south bank of Cow Bayou during the height of farm tenancy. The archaeological characteristics of the site resemble those of other late nineteenth- to early twentieth-century scatters recently investigated by Garrow & Associates, Inc., in eastern Arkansas. These scatters are dominated by kitchen refuse, especially bottle glass, with architectural items occurring in low frequencies, and are interpreted as being associated with low income rural households (i.e., tenant residences). Comparative analysis between the Lewis site and two other similar sites in eastern Arkansas are made using the Robinson Index of Agreement. These analyses demonstrate that status and ethnicity are difficult to determine strictly through study of archaeological assemblages.

No further archaeological work is recommended for the Lewis site. The site does not appear to meet current National Register criteria, due to its recent age, the removal of the structure, and complete recovery from the surface. However, the site study has made a significant contribution to the understanding of the artifact patterns of early twentieth-century farmsteads in eastern Arkansas, as well as provided data and methods for future research concerning status differentiation.

## ACKNOWLEDGEMENTS

This report has benefited from the assistance of several individuals. Mr. Douglas Prescott, Memphis District COE, demonstrated flexibility and concern in the management of the project. His cooperation and interest are greatly appreciated. Mr. Jerry Hilliard, Registrar of the Arkansas Archeological Survey, Fayetteville, is thanked for his prompt reply to requests for access to state site files. Mr. Charlie Daniels, Commissioner of State Lands, was equally prompt in responding to requests for General Land Office (GLO) Plat sheets. The employees of the St. Francis Levee District Office in West Memphis, Arkansas are thanked for their cooperation in locating Mr. Lewis. Dr. Charles H. McNutt, Memphis State University, assisted in seriating the similarity matrices. Dr. Gerald P. Smith, C. H. Nash Museum, contributed copies of the 1963 Park Place Arkansas topographic map.

A number of Garrow and Associates, Inc. employees contributed to the completion of this project. Fieldwork was directed by the author, who was assisted by Robert Halle, Senior Field Technician, and Mr. Brian Collins, Field Technician. Cleaning and processing of the artifacts was also competently handled by these gentlemen. Analysis of the recovered material was conducted by the author. Candice Spearman produced the photographic prints used in the report. Vince Macek prepared the excellent graphics accompanying the document. Editing of the document was handled by Patricia H. Baker in our Atlanta office.

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## I. INTRODUCTION

### PURPOSE OF THE STUDY

The report describes the results of archaeological testing of a proposed scour repair area above Bridge No. 4 on the Marianna to Madison section of the St. Francis Floodway in Lee County, Arkansas. The field investigations were conducted for the U.S. Army Corps of Engineers, Memphis District by Garrow & Associates, Inc., Memphis, in January and February, 1992. The historic site documented in this report (3LE266) was a black owned 40-acre family farm, primarily occupied from 1906 to 1969 by members of the Lewis Family. Structures associated with the farm are no longer standing; the site is manifested by a historic artifact scatter in a plowed field.

### PROJECT LOCATION

The project area can be found on the 1984 USGS Soudan, Arkansas 7.5 minute series provisional topographic map, in the SE 1/4 of section 24, T3N, R4E, on the west bank of the St. Francis Floodway (Figure 1). The area is bordered by Sandy Slough to the south and by an unnamed drainage to the north. Crowley's Ridge is approximately 3 km north of the site. The proposed scour repair area is approximately 750 m north of Bridge No. 4, and approximately 6 km north of the intersection of Arkansas Highway 121 and U.S. 79. Marianna is 8.5 km south of the project area.

The project area is located in a soybean field along the crest of a north-south trending old natural levee paralleling the St. Francis Floodway. Immediately north of the proposed scour repair area, the floodway bends to the northeast and the natural levee mirrors this turn. In the flat environment of the eastern lowlands these old natural levees are known to be favored locations for both prehistoric and historic settlement. The most noticeable topographic feature of the site area is the steep, forested bank on the eastern perimeter of the site, which leads down to the floodway. The floodway, formerly Cow Bayou, lies approximately 6.5 m lower than the top bank, in a relic channel of the St. Francis River.

West of the project area, across a rectangular soybean field, the terrain slopes gently away from the natural levee into a flat. The elevation of the site is 58.8 m (193 feet) above mean sea level (AMSL), based on a COE datum on site. The natural levee is cut at fairly regular intervals by lower sloughs and drainways, including Sandy

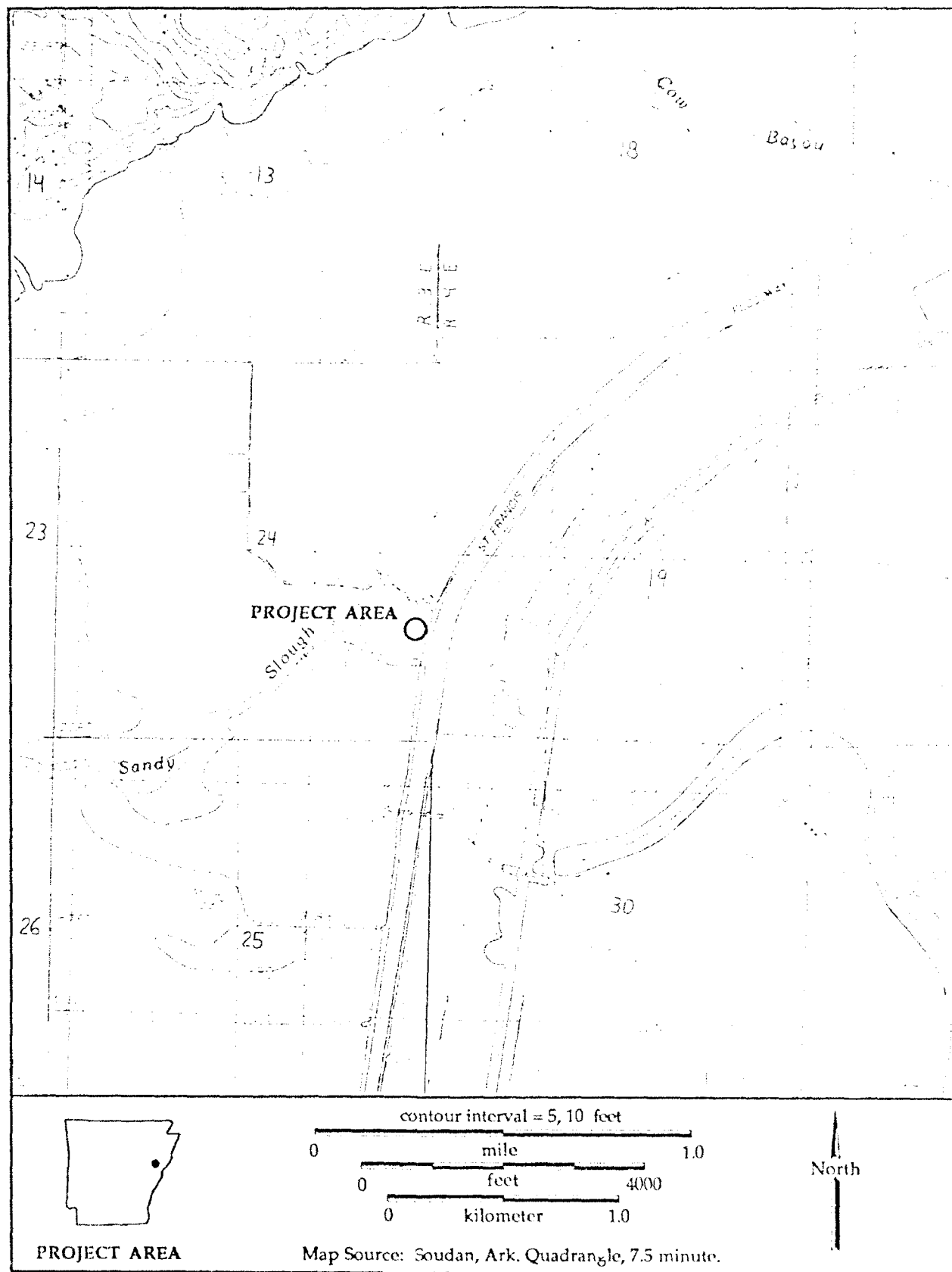


Figure 1. Project Area Location.

Slough to the south, which has a culvert crossing and is densely vegetated. The northern limit of the site is a low vegetated drain not shown on the USGS (1984) topographic map. This ditch parallels a deep unnamed drainage found some 50 m further north which is shown on the Soudan quadrangle (USGS 1984). This unnamed drainage is the scour to be repaired.

The unnamed drainage to the north is today a gully, impassable by vehicle, although a wooden trestle bridge crossed the drainage in the past (see Gray 1977:Sheet 14). Apparently this drainage has received increased water flow since drainage improvements were made between 1974 and 1984 in the northern portion of section 24. Erosion has quickly widened and degraded the drainway, and may have caused the collapse of the old trestle bridge. The Soudan quadrangle (USGS 1984) shows the roadway along the top bank of the channel skirting around this area (see Figure 1). Part of the proposed work on this project consists of replacing the roadway to and over this gully, and it is the roadway which will impact the historic site documented in this report.

## OUTLINE OF THE REPORT

The following report documents the methods utilized to conduct the study and the results achieved. The local environmental and physiographic conditions of the project area are reviewed in Chapter II. Information on the culture history of the central drainage of the Mississippi Alluvial Valley is presented in Chapter III, with special emphasis on the historic era. Chapter IV discusses the general research design used to guide the cultural resources investigations, as well as detailed discussions on the methods employed during the literature and records search, field investigations, and laboratory analysis. The results of the study are included in Chapter V. The document concludes with a summary and recommendations in Chapter VI. Appendix 1 provides detailed information concerning the controlled surface collection taken from the site, which is summarized in Chapter V. The remaining appendixs contains the resumes of the key project personnel.

## II. ENVIRONMENTAL SETTING

### PHYSIOGRAPHY AND GEOLOGY

Lee County contains three major topographic regions: the Eastern Lowlands, Crowley's Ridge, and the Western Lowlands. The Lewis site is located in the Eastern Lowlands of the county, which is contained within the meander belt of the Mississippi River. Until ditch and levee construction was begun in the late nineteenth century, this part of the county was subject to overflow from both the Mississippi and St. Francis rivers. The surface alluvium exceeds 100 feet in depth and is derived from soil, rock, and sediment from throughout the upper Mississippi River Basin (Gray 1977:2). The topography of this portion of the county ranges from level bodies of slackwater clays to undulating series of ridges and swales (Gray 1977:2). These ridges represent natural levees of abandoned stream channels.

Geologically there are only two divisions in Lee County, with the distinction being that the Eastern Lowlands formed in alluvium, while Crowley's Ridge and the Western Lowlands are capped in loess (Gray 1977:2). The Eastern Lowlands is a gently undulating plain between 53.3 and 62.5 m above mean sea level (AMSL). Crowley's Ridge, the western border of the Eastern Lowlands, is the eroded remnant of an extensive plateau from 61.0 to 121.9 m AMSL. Crowley's Ridge is composed of Eocene clays overlain by Pliocene sands and gravels and finally capped with approximately 25 m of Pleistocene loess (Deneke 1981:120).

### HYDROLOGY

Drainage in the county is generally southward through a system of natural and improved drainways and connecting artificial channels (Gray 1977:2). The western portion of the county is drained by a number of creeks which empty by way of the White River into the Mississippi River. The north central area of Lee County is drained by way of the L'Anguille River into the St. Francis River. The St. Francis River drains the eastern part of the county and empties into the Mississippi River near Helena, Arkansas. The flat landscape contains numerous sluggish streams, bayous, swamps, and oxbow lakes. The areas between Crowleys Ridge and the St. Francis Floodway are drained by the floodway. The prime farmland east of the floodway and west of the Mississippi River levee are drained by artificial channels and pumping stations. The Huxtable Dam and Pumping Station is 12 miles southeast of the site.

## SOILS

Lee County has rich soil and contains over 230,000 acres of cultivated farmland. The project area is situated on one of 10 major soil associations found within Lee County (Gray 1977:General Soil Map). The Alligator-Earle association consists of level and gently undulating clayey soils in slackwater areas (Gray 1977:7). These soils are derived from thin beds of clayey sediments deposited over coarser material by still or slowly moving flood water. This association includes about 9 percent of the county. Soils in this association are suited to farming, with approximately 85 percent of the acreage in cultivation. Part of this association is in the St. Francis River Floodway and is subject to frequent flooding, mainly between January and June. The main crops grown on these soils are cotton and soybeans.

Differences in elevation within the county are marked by distinctive sediment types. The U.S. Soil Conservation Service has mapped the natural sediments in the study area as Dundee silt loam (Gray 1977:Sheet 14). The Dundee series consists of somewhat poorly drained soils on the lower part of old natural levees along bayous and abandoned river channels (Gray 1977:15). These soils formed in stratified beds of loamy sediments, which were deposited as silty particles settled out of spreading floodwaters losing velocity. Natural fertility is high and permeability is moderately slow. The Dundee series are placed in the Alfisols Order and the Aeric Ochraqualfs subgroup (Gray 1977:94). A representative profile of Dundee silt loam to 29 inches below surface is described by Gray (1977:15) as:

...Ap-0 to 6 inches (0-15.2 cm), dark grayish-brown (10YR 4/2) silt loam; weak fine granular structure; friable; medium acid; abrupt, smooth boundary.

...A1-6 to 12 inches (15.2-30.5 cm), dark grayish brown (10YR 4/2) silt loam; few fine distinct yellowish brown mottles; weak coarse that breaks to fine subangular blocky structure; friable; common fine roots; few fine pores; strongly acid; abrupt smooth boundary.

...B21tg-12 to 29 inches (30.5-73.7 cm), grayish brown (10YR 5/2) silty clay loam; common medium distinct yellowish brown (10YR 5/4) and dark yellowish brown (10YR 4/4) mottles; moderate fine and medium subangular blocky structure; firm; continuous clay film on faces of peds; faces of peds darker than crushed mass; root holes coated with clay; few fine roots; fine roots follow along ped faces; few fine pores; few fine dark concretions; strongly acid; clear strong boundary.

## CLIMATE

The climate of Lee County is typical of the Mississippi Alluvial Valley and can be characterized as warm and moist, with relatively mild winters. The hottest months are June and July, with average temperatures of 80.4°F and the coolest month is January, with average temperatures of 41.0°F (Gray 1977:Table 3). Temperature extremes range from over 100°F in the summer, to the "teens" in the winter. The growing season is long, normally including the seven month period from April through October (Gray 1977:3).

Relative humidity averages about 70 percent throughout the year. Rainfall averages 49.3 inches per annum, with the greatest precipitation coming in the winter and early spring (Gray 1977:51). Late summer and early fall is the driest time of year. Thunderstorms are common in the summer, but the rainfall is erratic and poorly distributed, making droughts frequent. Snowfall is a negligible source of moisture.

## FLORA AND FAUNA

When settlers first arrived in Lee County, the land was covered with dense hardwood forests. The rich alluvial soils supported some of the best hardwoods in the southern United States. Alluvial ridges and natural levees support sweetgum (*Liquidambar styraciflua*), oaks (*Quercus* sp.), ash (*Fraxinus* sp.), honey locust (*Gleditsia triacanthos*), and hackberry (*Celtis occidentalis*). Lower lying areas and sloughs supported cypress (*Taxodium* sp.), water oak (*Quercus nigra*), willow oak (*Quercus phellos*), tupelo gum (*Nyssa aquatica*), birch (*Betula* sp.), cottonwood (*Populus deltoides*), sycamore (*Plantanus occidentalis*), willow (*Salix* sp.), shagbark and scalybark hickories (*Carya* sp.), elms (*Ulmus* sp.), and other water tolerant hardwoods. Cane could also be gathered in the floodplains. Today, in contrast to this unbroken forest, much of the acreage has been cleared for agriculture, and the original forest cover has been reduced to about 8 percent or less of the land area (Deneke 1981:8).

The dense hardwood forest supported a wide variety of wildlife. Native mammals included bison (*Bison* sp.), white-tailed deer (*Odocoileus virginianus*), black bear (*Ursus americanus*), wolf (*Canis* sp.), bobcat (*Lynx rufus*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), red fox (*Vulpes vulpes*), grey fox (*Urocyon cinereoargenteus*), beaver (*Castor canadensis*), and squirrels (*Sciurus* sp.). The area also supported a diverse number of reptiles and amphibians. Turkey (*Meleagris gallopavo*) were an important source of food for the early inhabitants of the area, as were migratory mallard ducks (*Anas platyrhynchos*) and canadian geese (*Branta canadensis*). Fish from the larger streams, oxbow lakes, and beaver ponds,

such as the flathead catfish (*Pylodictis olivaris*), alligator gar (*Lepisosteus spatula*), drum (*Pogonias cromis*), buffalo (*Ictiobus* sp.), largemouth bass (*Micropterus* sp.), walleye (*Stizostedion vitreum*), channel catfish (*Ictalurus punctatus*), bowfin (*Amia calva*), gar (*Lepisosteus* sp.), suckers, and many smaller fish, were also important food sources for prehistoric and historic occupants (Morse and Morse 1983:15).

## SITE MICROENVIRONMENT

The environment surrounding the site is typical of the eastern lowlands of Arkansas. The majority of the immediate area has been tilled for mechanized agriculture, most recently planted in soybeans. Sandy Slough, south of the site area, and a low drain to the north, are strips left in forest; although they may have been selectively cut, as the majority of the trees within these strips are fairly young. The steep bank down to the St. Francis Floodway is covered in secondary vegetation. It was probably at least partly cleared ca. 1958 during the conversion of Cow Bayou to the floodway ditch. Some of the plant species noted on the site map provided in Chapter V include two large pecan trees (*Carya illinoensis*), found on the southern margin of the site, along the sandy road there. These trees were once more abundant in the site area. Dominating the site area is one very large, likely 100+ years old, Bald Cypress, which as a result of its higher, drier position exhibits no knees. A large colony of common scouring rush (*Equisetum hyemale*), a member of the horsetail family, extends across the top bank on the northern portion of the site near the old trestle bridge. This evergreen perennial species grows on higher, sandy soils, and is sometimes used for bank stabilization. A colony of naturalized daffodils was noted along the top bank approximately 10 m east of the test units. These plants are an introduced species and mark the front of the Lewis Family residence. Also mapped were several overgrown, brushy areas along the eastern edge of the soybean field, which are avoided during plowing.



### III. CULTURAL OVERVIEW

#### PREHISTORIC OVERVIEW

The prehistoric period in the southeastern United States is traditionally divided into four major periods: Paleoindian, Archaic, Woodland, and Mississippian. Each of these periods is defined by characteristic artifact assemblages and patterns of subsistence and settlement. The area has seen extensive investigation since the middle of the last century. The following is a brief summation of the prehistoric sequence for east-central Arkansas. For more in depth discussions of the local archaeological manifestations and research problems the reader is referred to Davis (1982), House (1982a, 1991), Morse and Morse (1983), and Phillips (1970).

#### Paleoindian Period (ca. 12,000-7,500 B.C.)

The earliest occupation of this portion of the lower Mississippi River alluvial valley occurred during the Paleoindian period. Sparse populations of hunting and gathering bands are postulated. Early Paleoindian sites, identified by fluted Clovis projectile points, are rare in east-central Arkansas. The inhospitable environment associated with heavy glacial runoff following the Wisconsin glaciation and the thick mantle of wind deposited loess covering the river terraces and uplands are thought to contribute to the low archaeological visibility of Paleoindian remains. One site from the L'Anguille River basin survey (3SF270) yielded a Clovis point (Anderson et al. 1989:Appendix II, 203-206).

The Dalton period is considered to be transitional between the Paleoindian and the Archaic traditions. In terms of chronological placement, it is often considered either terminal Paleoindian or Archaic. Goodyear (1982) has argued that Dalton represents a distinct temporal interval between the two periods, occurring between 8,500-7,800 B.C. In terms of adaptation, however, Dalton appears to be very similar to Paleoindian. The key distinguishing feature of the material culture is the Dalton point, which is lanceolate, but not fluted. Sixteen sites yielded a total of 20 Dalton points during the L'Anguille River Basin survey (Anderson et al. 1989:Appendix II, 203-206). Six of these sites are located in Lee County on the lower portion of the L'Anguille River, north of Marianna: 3LE101, 3LE142, 3LE143, 3LE175, 3LE194 and 3LE218.

### Archaic Period (ca. 7,500-1,000 B.C.)

With the glacial retreat approximately 10,000 years ago and the subsequent shift to a warmer, drier climate, native subsistence and settlement patterns changed in response to the environment. Though poorly documented in the literature, Archaic sites are frequent and widespread across east-central Arkansas (House 1982b:SE8). These sites lack ceramics and are characterized by large hafted bifacial tools, lithic manufacturing debris, cobble tools, and large quantities of fire cracked rock. Use of Ouachita Mountain novaculite peaks during the Archaic period.

Archaic culture is characterized by a foraging adaptation practiced by small, highly mobile groups. The Archaic period is traditionally subdivided into early, middle, and late periods. In east-central Arkansas, no stratified Archaic sites have been excavated or dated, thus local projectile points are compared to those from other areas with known stratigraphic sequences. The Early Archaic (ca. 7,500-5,000 B.C.) is marked by the beginning of the Holocene, with a corresponding new regime of flora and fauna, and a shift to a more localized subsistence strategy based on seasonal harvest of plant and animal resources. Similar to earlier occupations, Early Archaic sites tend to be ephemeral scatters, reflecting a mobile lifestyle by small groups. Diagnostic projectile points in the central valley include San Petrice, St. Charles Notched, Hardin Barbed, Rice Contracting Stemmed, and examples in the Kirk/Palmer cluster (Morse and Morse 1983:104-108; Smith 1991:47). Terminal Early Archaic bifurcated forms, common in other areas of the Southeast, appear to be absent (Chapman 1975:152; Morse and Morse 1983:104). The L'Anguille River Basin Survey recorded a total of 21 Early Archaic projectile points from 14 sites (Anderson et al. 1989:Appendix II, 203-206), with Hardin Barbed being the most common form (n=17). Seven of these sites are located in Lee County.

The Middle Archaic period (ca. 5,000-3,000 B.C.) is poorly represented in southeast Arkansas. Diagnostic projectile points include basal notched point forms similar to Marshall (Suhm and Jelks 1962), Eva (Lewis and Lewis 1961:40), Calf Creek types (Dickson 1970:71-72, 78), and side notched Hickory Ridge and Cache River points (Morse 1982:22; Morse and Morse 1983:108-11). The Middle Archaic represents a period of increasingly localized exploitation of the resource base and expanded efficiency in the utilization of terrestrial and riverine resources. Morse and Morse (1983) have suggested that the term "Hypsithermal Archaic" be used for this period in the Central Mississippi Valley to denote depopulation of the lowlands in response to a warmer, drier climatic era. In contrast to Morse, Chapman (1975) has argued that the lowlands were occupied in the Middle Archaic, based on observations in Missouri. Overall, population levels seem to have significantly increased, based on the greater number of recorded sites. Large, intensely occupied sites appear for the first time in the archaeological record throughout the southeastern United States. Smaller camp sites are commonly found. Some interregional exchange of exotic goods such as copper artifacts occurs during this period. The L'Anguille River Basin Survey recorded a total of 21 Middle Archaic

projectile points from 14 sites (Anderson et al. 1989:Appendix II, 203-206), with Hickory Ridge being the most common form (n=10). Seven of these sites are located in Lee County.

The Late Archaic period (ca. 3,000-1,000 B.C.) continued the development of more sophisticated adaptations to localized resource zones. A range of site types from dense occupational middens to lithic scatters have been identified in northeast Arkansas. Midden sites tend to occur near the emergence of major streams from the Ozarks and Crowley's Ridge. The large number of sites documented for this period suggests that the population levels continued to increase. Human habitation of the lowlands expanded and intensified during this period. The use of cultigens becomes widespread, with evidence for use of native seed plants and tropical species (squash, gourd). Late Archaic sites are identified by a range of artifact types, including Big Creek, Motley, Williams, Marcos, Palmillas, Bulverde, Delhi, Evans, and Gary point types (Suhm and Jelks 1962; Ford and Webb 1956), chipped stone adzes, and rarely steatite bowls. The L'Anguille River basin survey recorded a total of 182 Late Archaic projectile points from 63 sites (Anderson et al. 1989:Appendix II, 203-206), with Weems being the most common form (n=77). Forty of these sites are located in Lee County.

At the end of the Late Archaic period, clear relationships with the Poverty Point complex in the lower Mississippi alluvial valley are evident in the widespread occurrence of baked clay objects and occasional lapidary items such as carved and polished beads. This period, after 1,200 B.C. up to the introduction of ceramics, is referred to in western Tennessee as "Poverty Point" by Smith (1972, 1991) and "Transitional Late Archaic" by Peterson (1979). Baked clay objects, recovered at the Hugo Site in Phillips County, Arkansas, are similar to the grooved cylindrical type found at the Jaketown site in Mississippi and the Poverty Point site in Louisiana (Phillips 1970:871). No phases are defined for the project area.

#### Woodland Period (ca. 1,000 B.C.-A.D. 800)

The Woodland period in the Southeast is traditionally divided into three subperiods: Early Woodland, Middle Woodland, and Late Woodland. The Early Woodland period (ca. 1,000-500 B.C.) is traditionally marked by the introduction of pottery, the appearance of elaborate burial mound ceremonialism, and the first evidence of extensive horticulture. Settlement systems are characterized by small dispersed villages located in the lowlands, with upland areas at best little more than seasonally occupied hinterlands (Morse and Morse 1983:143-144). The term Tchula has been used to refer to early Woodland components in the northern portion of the lower Mississippi alluvial valley (Phillips et al. 1951:431-436). This period is not well defined throughout the lower Mississippi alluvial valley. No Tchula phase has been formally defined in the study area, although limited data from the Mound City site in West Memphis, Arkansas, suggests that eastern Arkansas population during

the last millennium B.C. exhibit general affinities to the Turkey Ridge phase (Phillips 1970:878-879) of extreme northwest Mississippi and southeastern Tennessee (see Morse and Morse 1983:145). Ceramic marker types used to identify Tchula period sites include Cormorant Cord Impressed, Withers Fabric Impressed, Mulberry Creek Cordmarked, Lake Borgne Incised, Tchefuncte Incised, and Tchefuncte Stamped (Rolingston 1982a:SE12). These grog or clay tempered ceramic types contrast sharply with the sand tempered wares of the contemporaneous Pascola phase to the north.

The Middle Woodland period (ca. 500 B.C.-A.D. 500) witnessed the emergence of widespread exchange networks throughout the Southeast and Midwest, involving a number of raw materials and finely crafted finished goods. In the central and lower Mississippi valley this period is referred to as Marksville. A number of large mound sites occur within the major drainages on natural levees, many of them containing a wealth of imported goods, including copper, mica, and shell artifacts. The archaeological record of the Marksville period consists mainly of ceramic assemblages, especially the Marksville Incised and Marksville Stamped types. Marksville subsistence patterns are not fully understood (Rolingston 1982b:SE14-15). A settlement pattern of dispersed autonomous villages and infrequent ceremonial centers is suggested (Morse and Morse 1983:162). The Helena Mounds, near Helena Crossing, Arkansas, contained numerous burials and artifacts suggestive of both northern and southern spheres of influence (Ford 1963). The project area is located in the Helena phase, centered on the Helena Crossing site (Phillips 1970:Figure 444).

During the Late Woodland period (ca. A.D. 500- 700) the elaborate ceremonialism, trade activity, and earthwork construction associated with the Marksville period disappeared or became greatly attenuated. In southeast Arkansas this period is known as Baytown, named for the Baytown site or Indian Bay Mounds in Monroe County. Despite the fact that the type site for this period is located in the lower White River basin, the period is poorly understood throughout southeastern Arkansas. The diagnostic traits characterizing this period are clay tempered ceramics, mainly Mulberry Creek Cord Marked, Larto Red Filmed, and Baytown Plain, with small percentages of Alligator Incised, Salmon Brushed, and Indian Bay Stamped. Large, thick walled vessels are common in the Baytown period. A number of site types are present. Some, like the Baytown site, have conical or dome shaped mounds. These larger sites with deep deposits suggest a larger and more stable population than the Marksville period (Rolingston 1982c:SE17). The Troublesome Lake site (3LE128), located 3 km east of the study area has a minor Baytown component represented by a single stemmed dart point and grog tempered ceramics.

The Late Woodland developed into a Coles Creek period culture along and south of the Arkansas River, after about A.D. 700. The Toltec site, near Little Rock, was a major regional center during the Coles Creek period. Research at Toltec has resulted in the recognition of a new cultural unit called Plum Bayou (Rolingston 1982d).

The presence of Coles Creek Incised ceramics is the primary diagnostic marker for the period. Sites range from large multi-mound complexes to single mounds and midden sites variously interpreted as small villages or camps. This diversity of settlement pattern suggests a hierarchical political structure (Rolingston 1982c:SE20). During the Late Woodland period, the foundations of the cultural adaptation known as the Mississippian developed in the Mississippi valley, and northeast Arkansas may be the area where this development first emerged.

#### Mississippian Period (ca. A.D. 800-1541)

The Mississippian period witnessed the development of the most complex aboriginal sociopolitical systems in the southeastern United States. The widespread construction of earthworks, rank-size settlement systems, and the reemergence of long-distance exchange networks attest to the development of hierarchical societies commonly considered to be chiefdoms (Service 1962). Moreover, maize (*Zea mays*) became the primary cultigen throughout much of the Southeast, providing a crop more susceptible to intensification than the native starchy and oily seeds that were favored during the Woodland period.

Mississippian sites are common in eastern Arkansas and are generally recognized by the presence of shell tempered ceramics. The best documented initial Mississippian assemblage comes from the Zebree site in northwest Arkansas (Morse and Morse 1980), which is the type site for the Big Lake phase. Late Mississippian period populations began to cluster along the floodplains of the Mississippi and other major streams. Local ceramic variations are the basis for the identification of a distinctive Kent phase along the lower St. Francis (Phillips 1970; House 1991). A number of Kent phase sites have been recorded by Phillips (1970:Figure 447) in the vicinity of this project, including Clay Hill (LMS#13-N-7), Conner (LMS#13-N-14), Soudan (LMS#13-N-1), Rollinson (LMS#13-N-13), Red Oak (LMS#13-N-9), Grant (LMS#13-N-11), and Greer (LMS#13-N-17). The Clay Hill site (3LE11) is located on Crowley's Ridge immediately north of the Lewis site. Neighboring phases include Old Town in the lower White River basin, and Parkin phase on the upper St. Francis (see Morse 1981; Smith 1990). A Mississippian farmstead or hamlet component has also recently been recorded at the Troublesome Lake site, very near the Conner site.

#### Protohistoric Period (ca. A.D. 1541-1673)

The protohistoric occupation in eastern Arkansas has been summarized by a number of authors (Phillips et al. 1951; Ford 1961; Morse and Morse 1983). This period corresponds to the interval from the de Soto expedition up to the initial French expeditions into the area. The de Soto chroniclers' descriptions of the Mississippian cultures they encountered are the only historic record of the late

prehistoric occupations of the region (Brain 1985). Williams (1980) has identified the Armorel phase as the seventeenth-century coalescence of the closely related Walls and Nodena phase populations. Horizon markers for the early contact period include European trade goods such as Chevron glass beads, Clarksdale bells, as well as Nodena points, thumbnail scrapers, and distinctive vessel forms, especially "head pots" and "teapots." Post-contact burial practices shifted to secondary interment in large earthen urns, demonstrating associations with the late Alabama River phase along the upper section of the Tombigbee River drainage.

An archaeological definition of the Quapaw phase was initially made by Phillips (1970:943) and updated by Hoffman (1977). Quapaw phase sites are located along the lower Arkansas River. Quapaw phase ceramics are predominately shell tempered plain wares, although Old Town Red and Avenue Polychrome, as well as distinctive bottles, are known to have been recovered from burials. This, coupled with a nucleated village plan and mound-plaza complex, suggests to archaeologists that the Quapaw phase arose out of the native Mississippian cultures of the area. The identification of the archaeological Quapaw phase with the ethnohistorically documented Quapaw people has been termed "conclusive" by Ford (1961) through excavations at the Menard Mounds, believed to be the village of Osotouy. However, this information conflicts with tribal oral tradition, linguistic data, and much of the ethnological and historic information (Hoffman 1990:219). The result of this "Quapaw Paradox" is the need to maintain the conceptual distinction between the historic Quapaw tribe and language from the archaeological phase (House and McKelway 1982:SE41).

## HISTORIC OVERVIEW

The historic period begins with the initiation of more or less continuous contact with Old World peoples, beginning with early French explorers in the late seventeenth century. The historic period is divided into subunits which are intended to reflect the major political and economic developments in east-central Arkansas.

### Colonial Period (ca. 1673-1804)

Following the de Soto expedition there were no further written descriptions of eastern Arkansas until 1673, when the Frenchmen Father Marquette and Louis Jolliet travelled down the Mississippi from Canada in canoes. During the 132 years between the de Soto expedition and this first recorded French expedition, the complex Mississippian chiefdoms with large populations disappeared. There is little doubt that disease epidemics introduced by contact with Old World viruses depopulated large areas of the interior Southeast, including northeastern Arkansas

(Smith 1987; Ramenofsky 1987). At the mouth of the Arkansas River, in 1673, the French encountered the Quapaw, who already possessed such European goods as beads, knives, and hoes.

La Salle made his famous journey down the Mississippi in 1682 and stopped for several days with the Quapaw. The Quapaw sought an alliance with the French in exchange for guns to combat their enemies, chiefly the Chickasaw, whom the English Carolina traders had already armed in a similar effort to draw political alliances. In August 1686, Henri de Tonty settled six of his men at the first Arkansas Post, some 35 miles from the mouth of the Arkansas, near the village of Osotouy. By the end of the seventeenth century, the region was undoubtedly involved in the European fur trade network, as at least 800 *coureurs de bois* (forest rangers) were hunting in west New France (Arnold 1991:7). Tonty's post was apparently abandoned in 1699, and serious settlement efforts were several years away.

In 1717 the Arkansas colony charter was given to a Scotsman, John Law, who was a celebrated eighteenth-century French financier. In August of 1721 approximately 80 Frenchmen arrived at John Law's concession to re-establish French presence in the region at the location of Tonty's abandoned trading post. La Harpe, who explored the upper reaches of the Arkansas River valley in 1722, stopped at Law's concession and reported "forty seven persons...a score of poorly arranged cabins and three arpents of cleared ground" (Smith 1951:340, 349; Arnold 1991:12). The military post here was abandoned in 1725, and revived again in 1731 when John Law went bankrupt and the entire colony's charter reverted back to the French crown (where it would stay for the remainder of French rule).

During the 1730s and 1740s the Chickasaw were constantly raiding French shipping on the Mississippi. Governor Bienville organized two unsuccessful military campaigns against the Chickasaw, as well as motivating the Quapaw to bring in a few Chickasaw scalps per year. A band of 150 Chickasaw and Abekas Indians retaliated for these insults on May 10, 1749 by razing Law's old settlement. James Adair, a British trader who lived with the Chickasaw, reported the execution of the male captives from this raid in retaliation for the wounding of their chief Payah Matahah during the fighting. This incident alarmed the entire colony of Louisiana, and for security reasons the Arkansas Post was moved up the Arkansas River to join the Quapaw at *Ecores Rouges* (Red Bluffs) where the Arkansas Post National Memorial now stands. A new fort was constructed here, but the garrison remained small; in 1751, it consisted of only eight men (Arnold 1991:105-107).

In 1756, with the beginning of the Seven Year's War in Europe (the French and Indian War), the Arkansas Post was strategically moved downriver to Desha County, to more easily aid French convoys on the Mississippi River. Garrison strength was kept at approximately 50 men until the Spanish took over Louisiana following the signing of the Treaty of Paris February 10, 1763. McClurkan (1971) has reported on archaeological investigations at this site of the Arkansas Post. Although

the Spanish dispatched garrisons to maintain the post, few Spanish colonists came to Spanish Louisiana. The Spanish really saw Arkansas as a buffer zone between their truly valuable colony, Mexico, and the British colonists. This resulted in the unusual situation of a Spanish garrison protecting the French creole inhabitants who had been largely abandoned by their government. The post remained in the downstream location, which was frequently flooded and where agriculture could hardly be practiced, until 1779, when the Spanish moved it back to the former *Ecores Rouges* location.

During the American Revolution, Spanish Louisiana officials provided aid to the colonial efforts. At this time, Arkansas Post served as a place of refuge and supply for revolutionary forces. One of two Revolutionary War battles fought west of the Mississippi was conducted at Arkansas Post on April 17, 1783. James Colbert, a Scot, assaulted the post with a basically Chickasaw force of no more than 100 men. The assault was repulsed after heavy firing, when 10 Spanish soldiers created a diversion, and the loyalists fled downriver.

Archaeological investigations under the direction of Preston Holder in 1956 and 1957 resulted in the recovery of architectural data and ceramics dating to this final colonial occupation of Arkansas Post, from 1779-1804. Recent analysis of these materials has been reported by Walthall (1991), who uses comparative data to formulate mean ceramic dates for the site. Walthall (1991:110-112) observes a temporal lag of 26.5 years between the mean ceramic dates and the median historic dates for the site, further indication of the isolation of Arkansas.

There was never a substantial agricultural class at the Arkansas Post, a fact which was bemoaned by repeated commandants (Arnold 1991:60). French Illinois farmers had provided surplus wheat prior to the American Revolution and U.S. flour from Ohio replaced it afterwards. Three French families, refugees from the Northwest Ordinance, and five German Protestant families apparently produced the majority of the crops grown at the post in 1791. At this time there is the first mention of a flour mill, which would have been horse drawn. During the 1790s the average crop value produced at Arkansas Post was only \$4,100 (Arnold 1991:62).

The colonial documents clearly indicate that the vast majority of the population of Arkansas was involved in hunting or the fur trade in one way or another. Revenues from fur and skin trade with the bellicose Osage alone amounted to \$18,750 annually in the final years of the colonial period (Arnold 1991:62). The Osage considered the Spanish refusal to place a regular trader for them at Arkansas Post a *de facto* act of war. This, coupled with the Osage considering Arkansas their hunting ground, lead to constant conflict and raiding in the late colonial period. This pattern of Osage raiding and murdering of European hunters on the White and St. Francis rivers not only disrupted trade in the region, but also left Arkansas relatively uninhabited and underdeveloped.



Stringent religious and political requirements kept most American settlers from trying to move to Spanish territory until these strictures were eased at the end of the eighteenth century. During the late eighteenth century, two Spanish land grants were made in Lee County, totaling 1,228 acres (Hanson and Moneyhon 1989:25). These land grants are located along the St. Francis River, in the southeast corner of the county, around the community of Philips Bayou (Apple and Keasler 1987:6). Philips Bayou and Philips County are named for Sylvanus Philips, who built a cabin on the Spanish grant tracts in 1798 (Apple and Keasler 1987:6). Disrupted Native American groups such as the Delaware and Shawnee were moving west of the Mississippi at this time. Cherokee began moving to the St. Francis drainage in 1794. By 1800, the Cherokee had begun to vie with the Osage for control of the Ozark highlands.

#### Early Eastern Arkansas (1804-1836)

The Jefferson Purchase of 1803 acquired Louisiana for the United States, and the area was finally open for American settlement. Arkansas Post was taken over by the U.S. Government on March 23, 1804. In an interesting arrangement, Lt. James B. Many of the U.S. Army, bearing a commission from the colonial prefect Pierre Laussat to act for the French Republic, received the dilapidated post from the Spanish Captain. At this time, the population of the Arkansas Post was less than 400, and its value was assessed at a mere \$631 (Arnold 1991:172). From 1804 to 1805, Arkansas was part of the Louisiana District, from 1805 to 1812 Arkansas was part of the Louisiana Territory, and from 1812 to 1819 it was considered part of the Missouri Territory. The Arkansas Territory became a reality on March 2, 1819, and included most of Oklahoma. Arkansas Post was the capitol of the Territory for one year, until 1820, when Little Rock (formerly *La Petite Roche*) assumed this role.

The arrival of the earliest settlers in Lee County dates to about 1815. The Dunn Family relocated from the earthquake stricken New Madrid area to the mouth of the St. Francis River (Apple and Keasler 1987:7). Apparently they settled in Utica, a Crowley's Ridge town which was the outgrowth of the surveying district set off by the U.S. Government. A number of explorers and naturalists passed through Arkansas in the early nineteenth century, such as Thomas Nuttall, Henry R. Schoolcraft, and George William Featherstonhaugh, but none of these men visited the Lee County area.

The survey of Arkansas Territory began in 1815, primarily to satisfy the land claims of War of 1812 veterans. U.S. land surveyors laid a base line from which all township and section lines of Arkansas, Missouri, Iowa, and Minnesota were built. Two trees were blazed to mark the intersection of this base line with the fifth principal meridian; this point lies at the southwest corner of Lee County. These trees were rediscovered in 1921 and are now part of a State Park. Although the base

line did not reach the western border of Arkansas until 1838, land sales in the eastern portion of the state began in 1821. Township surveys in the Lewis site area began in 1815.

By 1829 the population of the Helena area had increased to the point that a post road was authorized between Helena and Saint Francis. There was weekly mail service over this route. In 1829 there were no more than 40 families in Lee County, with the most densely settled portion near the project area, along Cow Bayou.

In 1820 steamboats appeared on Arkansas rivers, providing a more reliable, safer, and cheaper mode of transportation than had been available before. Some commercial traffic moved on the St. Francis and Black rivers, although these eastern rivers were developed more slowly than others, such as the Arkansas, Ouachita, Red, and White rivers. In 1836 the steamboat *Gladiator* became the first to reach St. Francis on the St. Francis River (Hanson and Moneyhon 1989:35). The steamboat *Plow Boy* was the first one recorded to go up the L'Anguille, in 1857 (Wall 1948:227). It carried hides, game, and fur to Memphis. Navigation was difficult on the L'Anguille, with large branches, piles of logs, and driftwood blocking the passage. The head of navigation was the site of present-day Marianna. Smaller keelboats carried goods further upstream.

Between 1831 and 1839, the U.S. Government moved Choctaw, Creek, Chickasaw, Seminole, and Cherokee Indians from Mississippi to Oklahoma (Indian Territory) (Hanson and Moneyhon 1989:18). Prior to that, a number of treaties had been negotiated; Lee County, and most of eastern Arkansas, was acquired as the result of the Osage Treaty of 1808. The Quapaw had given up much of their territory as early as 1818, and ceded the final two million acres in a treaty negotiated by Robert Crittenden in 1824. The Choctaw ceded their claims in Arkansas in 1825. The Cherokee, who had first received land in Arkansas in 1817, ceded their seven million acres in 1828 in exchange for land in Oklahoma. The last Indian claims in Arkansas were given up in the Caddo Treaty of July 1, 1835. The Native American population was essentially eliminated from Arkansas by 1840, although a contingent of Crow Indians reportedly had a village near Madison in St. Francis County at this time (Chowning 1954:8).

#### Antebellum Period (1836-1860)

In 1836 Arkansas became the twentieth-fifth state. The population at this time was 52,240, of which 19 percent were black slaves; Indians were not counted (Hanson and Moneyhon 1989:38). Steamboat traffic on the rivers and streams began to diminish the importance of the Military Road from Memphis to Little Rock at this time. Many veterans of the War of 1812 had been given tracts of land in eastern Arkansas for their service. The majority of these lands were unoccupied, and consequently were sold for taxes when statehood was attained (Chowning 1954:8). Between 1840

and 1860 the Helena area experienced rapid growth, primarily due to the development of plantation agriculture in this area.

Railroad surveys in eastern Arkansas began in 1850-1851 (Woolfolk 1967). The railroads were important because the swamps of eastern Arkansas made the 133 miles from Hopefield to Little Rock almost impassable. Early railroads were frequently washed out by floods, but in 1858 the Memphis and Little Rock Railroad was completed from Hopefield (West Memphis) to Madison. It did not cross Crowley's Ridge. Another line ran from Little Rock to DeValls Bluff, on the White River. Also in 1858, the first telegraph wire from Madison to Hopefield was strung.

Arkansas's political position prior to the Civil War was complex. In 1860, a full quarter of the population of 435,450 were slaves. Most voters favored the south, but were reluctant to break with the Union. Part of this reluctance stemmed from the state's position on the border of the Indian Territory and fear of attack from Indians loyal to the Union. The underdeveloped transportation system and the hope for federal aid to improve it was also a factor. However, after the Fort Sumter attack and President Lincoln's request for troops from Arkansas to help quell the rebellion, attitudes moved toward secession. In May, 1861, when Arkansas seceded from the Union, St. Francis, Monroe, and Phillips county delegates were among those in favor. Lee County was not formed at this time.

#### The Civil War and Reconstruction (1860-1874)

Two skirmishes took place on the L'Anguille River during the Civil War. Col. Robert Rambauer, First Missouri Infantry, reported on July 27, 1862 that a company of rebels was camped on L'Anguille Lake four miles southeast of Marianna (*Official Records* 1885:175). They were attacked by howitzers and fled. Five hundred rebels were hiding on "the island formed by the St. Francis and L'Anguille Rivers." These men scattered and escaped the Union forces.

Lt. Col. Oscar H. LaGrange, First Wisconsin Cavalry, reported a skirmish at L'Anguille Ferry August 2-3, 1862 (*Official Records* 1885:202), which was located about a mile from Marianna. Major Eggleston, commanding Union troops, was ordered to move to Marianna from Madison, and camped on the north bank of the L'Anguille River on August 2. He had 27 wagons, 130 men, and 100 horses and mules (*Official Records* 1885 I, XIII:203-204). Six hundred Texas rangers under the command of Col. Parsons attacked the Union soldiers near the ferry at daybreak. The Union forces were greatly outnumbered, and 11 were killed, 33 wounded, and 30 captured. The Confederates were well equipped with wagons and ambulances, and burned those of the Union. The Confederates withdrew toward Clarendon. Lt. Col. LaGrange came to the rescue of the Union troops, but the Confederates had already moved on.

During the war, much of the military action in Arkansas centered along the Mississippi River, with major battles at Memphis and Helena. Helena had been captured soon after the fall of Memphis in June, 1862. The Battle of Helena was fought on July 4, 1863, with 7,640 Confederates under Gen. Holmes attacking 4,129 entrenched Union soldiers under Gen. Prentiss. The Confederate plan was to relieve pressure on Vicksburg, then under siege by Gen. Grant. The confederates were repulsed by artillery fire from the gunboat *Tyler* and an earthwork, Fort Curtis, withdrawing to Little Rock. This failure, coupled with Lee's failure at Gettysburg and the surrender of Vicksburg on the same day, demoralized the Confederate Army in Arkansas.

Several outlaw gangs formed during the Civil War, preying on both sides. One notorious group, John Murrell's raiders, camped at Lone Pine southeast of Marianna. He preyed on flatboat shipping after the war and also on travelers of the Old St. Francis Road.

Lee County was created by the legislature on April 18, 1873. The territory was formerly portions of Phillips, Monroe, St. Francis, and Crittenden counties. The temporary seat of justice for the new county was located in Marianna. At this time the county was under carpetbag rule. Lee County was created with the help of W.H. Furbush, a black representative from Phillips County. Mr. Furbush was elected sheriff (1874-1878) of Lee County as a reward for his influence in the legislature and also for promising that the black vote for the other county offices went to Democrats (i.e., "whites") (Apple and Keasler 1987:3).

#### **Tenant Farm Activity Period (1874-1950)**

Farming by tenant operators rather than landowners was a significant characteristic of Arkansas agriculture after the Civil War. After the Civil War many plantation owners subdivided their holdings into smaller units that were farmed by tenants. This decentralization of the old plantation system developed during the reconstruction period as a means of stabilizing labor relations between former slaves and landowners. Sharecropping arrangements varied, but the basic principle was that the tenant provided labor, while the landowner provided land, implements, draft animals, and supplies. The two then shared the crop, with contracts that varied widely (Hanson and Moneyhon 1989:56).

By 1880, 31 percent of all farm operations in Arkansas were carried on by tenants. But in delta regions like eastern Lee County, where cotton plantations had dominated the economy before the Civil War, this proportion was as high as 90 percent (Hanson and Moneyhon 1989:56). For the remainder of the nineteenth century, economic conditions worked to undermine smaller agricultural operators and force them into tenancy. This trend led to the introduction of large numbers of

whites into what had been a primarily black tenant force. In 1890 the statewide proportion of tenant farms was at 32 percent, in 1900 this fraction had risen to 45 percent, and by 1910 the figure had increased to 50 percent. In Lee County the 1910 proportion of tenant farms was from 68-79 percent (Hanson and Moneyhon 1989:Figure 56). The rise in tenancy reached its high point in 1930, with 63 percent of all farms in Arkansas operated under this system.

Since 1930 the trend toward increasing tenancy has been reversed, primarily because of the introduction of agricultural mechanization which has made farm consolidation and the dispersal of tenants possible (Hanson and Moneyhon 1989:56). Tenancy has also closely paralleled farm size in the state. In 1900 the average farm size was 126 acres, but by 1930 the figure stood at 66 acres. Increasing agri-mechanization and the effects of the Great Depression resulted in an increase in the average size of farms to 265 acres by 1978 (Hanson and Moneyhon 1989:56). With this shift, the number of tenants steadily declined. By 1940 the proportion of tenant farmers had dropped to 53 percent, by 1950 to 38 percent, and by 1969 the figure was only at 13 percent.

The importance of the tenant farm period in the archaeological record is that it represents the maximum occupation period for the Mississippi delta counties, prior to the recent development of nonfarming rural settlement. A preliminary analysis has suggested that there are between 30,000 and 50,000 tenant house sites in eastern Arkansas (Stewart-Abernathy and Watkins 1982:HA18). This dispersed settlement pattern during the tenancy period contrasts sharply with the clustered settlement pattern prior to 1865 (Orser and Nekola 1985:68). Prunty (1955) has interpreted tenancy as a postbellum modification of the plantation system.

The archaeological characteristics and diagnostics of the tenant farm period have been summarized in the State Plan (Stewart-Abernathy and Watkins 1982:HA80). The settlement pattern during the tenant farm period is generally linear, following a road or bayou. In the project area, the road along the south bank of Cow Bayou and former Cow Bayou has what are likely tenant period sites at regular intervals, including the Lewis site. In the State Plan, each stead is stated to be located approximately 100 m from the next, following a regular interval. These steads each contain a house, privy, mule shed or barn, chicken house, pig sty, and a well house on a 20 to 40 acre fenced lot.

The vernacular architecture of the tenant house includes frame construction in single pen, abutted pen, shotgun, and double shotgun forms. These structures are usually built on brick or cement piers which elevate the floor of the house about 1 m above the surrounding ground surface. It is not necessary that these piers penetrate the ground; thus, they are of low visibility archaeologically, especially if the area is subsequently plowed (as frequently occurs). In addition to domestic ceramics, glass, and refuse, general tools, agricultural implements, and structural materials (brick, glass, nails) are recovered, all dating from 1870-1950. Economic

status is difficult to determine archaeologically, as tenants generally had cheaper (secondhand or out of date) goods supplied to them. One may also assume that mean ceramic dates (South 1977) for these sites will have a temporal lag with the median historic dates of occupation, as Walthall (1991) found in the late colonial occupations of eastern Arkansas.

### Draining and Clearing

The construction of flood control structures was largely accomplished during the tenancy period. The St. Francis basin had witnessed devastating damage in the major floods of 1858, 1862, 1867, 1882, 1883, 1886, and 1893, while medium floods occurred annually (Burke et al. 1945:4). The construction of levees and improved drainages was essential to the development of the area. Prior to 1850, levee construction had been unorganized and supported only by interested landowners. In 1858, the Governor of Arkansas appointed the first Swamp Land Secretary, who more or less organized levee construction by county (Burke et al. 1945:3). The Civil War slowed the development of the eastern portion of St. Francis County by delaying rebuilding of levees and railroads wrecked by flooding and neglect. Developments further up the Mississippi basin lead to increased flood heights during the 1870s and 1880s. The Mississippi River Commission then interceded and began to construct and repair levees along the St. Francis River in 1887. The formation of the St. Francis Levee District in 1893 contributed further to the control of flooding. Flooding remained a problem, and in 1927, 1929, and 1937, disastrous floods struck the area. Photographs of the towns of Bricky's and Cody, near the project area, show water up to the porch level of structures there in 1929 (Apple and Keasler 1987:22, 24). Local informants said that water was 10 feet deep over the highest ground of the Lewis site during the floods of the 1920s.

The St. Francis Floodway was constructed in the project area ca. 1958-1959 to drain excess water from as far north as southeast Missouri and the "sunk lands" near Marked Tree, Arkansas. The floodway now lies in the former bed of Cow Bayou, which occupied a relic channel of the St. Francis River. Bridge Number 4 was constructed ca. 1959 to allow farmers and residents to continue using the old travel route along the natural levee of Cow Bayou, which was bisected by the floodway channel.

In addition to flooding, the massive amount of timber was a tremendous obstacle to the development of the Eastern Lowlands and was difficult to remove. So despite the construction of levees, land prices did not go up substantially until roads and railroads made areas accessible. The expansion of the rail network closely parallels the boom in the timber industry. The cutting of timber began in earnest in the 1880s (Hanson and Moneyhon 1989:51). The timber became more valued in the 1900s, and the exhaustion of the forest in the 1920s by local mills lead to the creation of much cleared acreage (Hanson and Moneyhon 1989:51). Numerous support towns were

platted during this period and died with the exhaustion of the local timber resources (Stewart-Abernathy and Watkins 1982:HA19).

### Other Late Developments in Eastern Arkansas

In May, 1892, the Frisco Railroad bridge over the Mississippi River was opened. It was the first bridge over the Mississippi at Memphis and, at the time, the third largest bridge in the world (Woolfolk 1967). Prior to that time passengers and goods had to be ferried across the river. The second bridge linking Arkansas with the east opened in 1915. This Missouri-Pacific bridge was wide enough to have two-way traffic.

Arkansas railroads in the early twentieth century were one of the state's biggest businesses (Dew 1970:327-344). Large trunk lines such as the Iron Mountain Railroad crossed the state. Small independent lines were of regional importance. Industries, such as mines or lumber mills, owned their own railroads. In 1913, the Missouri-Pacific Railroad opened a line from Marianna to Memphis. In 1929, an overhead iron railroad bridge over the St. Francis River (with a lift span to allow barges to pass underneath) was dedicated at Cody approximately 4 miles east of the project area. This bridge is now gone, but the pilings remain and can be seen as one drives over the U.S. 79 bridge at Cody today. U.S. 79 was a gravel road until 1946 (Apple and Keasler 1987).

An agricultural depression after World War I and the nationwide depression of the 1930s severely affected the agricultural economy of Arkansas (Harrison 1954:356). Grain prices declined and property taxes could not be paid. Delinquency resulted in the foreclosure on millions of acres in rural Arkansas, which became state property. Individuals could settle this land by making a small clearing and building a home. They could then gain title to the land by making a nominal investment. Many small households surrounded by 20 to 40 acre plots date to this time period.

Since 1933, when the first allotment was placed on cotton, the importance of that crop has declined (Gray 1977). Cotton production involved a considerable quantity of laborers, especially in the days when the crop was planted and picked by hand. Even after the introduction of mechanized cotton pickers, weeding was done with hand hoes by "cotton choppers." The increased use of agricultural chemicals put much of the rural population out of work. Today, a more diversified cropping system that includes soybeans, milo, wheat, rice, alfalfa, sorghum, and pasture characterizes most farms in the county. Machinery began to replace livestock as the major source of farm power, and the acreage of corn needed to feed livestock in the county decreased. Farms in Lee County have been decreasing in number and increasing in size since 1954 (Gray 1977).

## PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

The area in and around eastern Lee County, Arkansas has been the subject of numerous archaeological investigations, beginning in the late nineteenth century with the mound surveys of C. B. Moore (1911) and Edward Palmer (1917). Standard references in northeast Arkansas include the report of archaeological investigations on the Cache River (Schiffer and House 1975), the Zebree archaeological project (Morse and Morse 1980), the Village Creek archaeological project (Klinger 1986), and the St. Francis Basin comprehensive overview program (Dekin et al. 1978). Morse and Morse (1983), Klinger et al. (1983), and Lafferty and Watkins (1987) have prepared excellent syntheses and listings of archaeological work in northeast Arkansas by both avocational and professional archaeologists. The Arkansas Archeological Survey also maintains a comprehensive list of publications and manuscripts available on a county by county basis. A number of large-scale cultural resources surveys have been initiated in recent years. Of most interest to the present study is the survey of 90 miles of the L'Anguille River basin in Lee, St. Francis, Cross, and Poinsett counties. In this survey, a total of 222 sites were documented, including 107 sites in Lee County (Anderson et al. 1989).

The study of early twentieth-century farmsteads provides data on otherwise sparsely documented lives of ordinary people. Stine (1990) recently assessed social inequality between black and white Piedmont farms in North Carolina by using artifact patterns. Stine suggests that artifact pattern analysis must be used with caution, and that use of patterning for testing general cultural processes is difficult and must be predicated for controlling specific variables, especially the effects of post-depositional processes. In various Chi-square tests of association, no significant differences were found between the entire assemblages at the two sites, although some variation was known to exist. Stine (1990:34-35) suggests that these types of sites be investigated using a different type of sampling design, namely an alternative method of stratification.

Archaeological and historical data collected at the Waverly Plantation, on the Tombigbee River in Mississippi, provides regional perspective on the material culture of black tenant farmers (Adams and Smith 1985). Although this study is centered on late nineteenth-century tenancy, it provides a model for similar studies in areas such as the current project, where literature on tenant occupations is sparse. Study of the store ledgers revealed that tenants bought nearly everything on credit, and paid approximately 10 percent more than cash customers. The demands of cotton production probably reduced the time available to hunt and gather, and resulted in an increase in the purchase of hog meat and corn meal from April to October. A study of ceramic vessel form revealed that tenants had an average of 58.5 percent plates and 15.7 percent bowls, which could demonstrate a dietary difference from landowners (Adams 1980:275).



Seasonality of purchases allowed Adams and Smith (1985:321) to reconstruct a late nineteenth-century typical tenant farmer's calendar. From December to January tenants worked at sawmills or brickyards, or made charcoal, and engaged in general repair of the homestead and equipment. In February and March, 86 percent of all nails were purchased, indicating repair work, seed was bought, and early plowing and weeding of gardens began, with 44 percent of all plows purchased at this time. From late March to April, planting cotton and weeding gardens were primary activities, with 25 percent of all hoes purchased. May and June were spent mainly chopping cotton, with 62 percent of hoes bought, and plowing, with 22 percent of plow points bought. July and August were construction months, but winter vegetables were also planted and summer harvesting was begun. The time from September to December was for picking cotton and pig butchering.

Recent investigations in Crittendon and St. Francis counties by Garrow & Associates, Inc. conducted for the Memphis District COE have produced valuable data concerning the archaeological attributes of late nineteenth- to early twentieth-century rural sites. These sites have been interpreted as tenant period scatters and appear to have archaeological commonalities expressed in artifact frequencies. Although detailed synthesis and interpretation of these sites are in their infancy, the reader is referred to the discussion provided in this report, as well as the earlier reports in which similar sites are discussed (Buchner and Childress 1991; Buchner and Weaver 1990; Childress 1990; Weaver 1991).

## IV. METHODS

### LITERATURE AND RECORDS SEARCH

The literature and records search was conducted for the purpose of inferring the potential presence and character of cultural resources in the project area. This portion of the project investigation was conducted by the Field Director at a number of locations and from a number of sources. Information on recorded site locations within a 3 km radius of what was first called the Sandy Slough Site area was supplied through correspondence with Mr. Jerry Hilliard, Registrar of the Arkansas Archeological Survey (AAS), Fayetteville. The Lee County Library in Marianna, Arkansas was consulted on September 6, 1991 for the purpose of researching local history and tenancy in Lee County. Correspondence with Mr. Charlie Daniels, the Arkansas Commissioner of State Lands, yielded copies of the original General Land Office (GLO) Plats of the survey area. Environmental information was obtained from various government publications, including *Soil Survey of Lee County, Arkansas* (Gray 1977). Some botanical information was taken from Smith (1979). In addition, Garrow & Associates, Inc. maintains extensive libraries in both Memphis and Atlanta which were reviewed in the preparation of this report.

### METHODS OF FIELD INVESTIGATION

Initial field inspection of the Sandy Slough Site was conducted by the Field Director on September 9, 1992. At this time, the site was covered in soybeans which completely obscured surface visibility. After consultation with Mr. Douglas Prescott, Memphis District COE, it was decided to delay field investigations until after the soybeans were cut. Notice to proceed was received on January 6, 1992 in Delivery Order Number 001 under Contract No. DACW66-91-D-0112.

Field investigations of the Sandy Slough Site were conducted on January 7 and 9, 1992. At this time conditions were excellent for delineating the maximum extent and identifying concentrations of the surface scatter, as surface visibility was close to 100 percent. In these two days, a 100 percent controlled surface collection was taken, two 1 x 1 m test units were excavated, and the site was mapped with reference to the COE baseline.

The presence of a staked COE baseline greatly facilitated the mapping of the site and was utilized as a baseline for our survey as well. The COE baseline consisted of

survey stakes at 50 foot intervals. Station 19+00 was located at the southern margin of the site area immediately north of a sandy road. Station 17+50 was utilized as the N0 E0 reference point for this survey, as it is centrally located. The northern margin of the site is immediately south of COE station number 15+00, found in a wooded drain. Approximately 20.25 m west of 15+00, off the baseline, an orange COE witness pole is found which reads : "Amz 140°" and "BM-N-13-3-91." A second orange COE witness pole can be found at station number 22+92.97, which is on the south bank of Sandy Slough. The COE baseline is oriented 14°20' east of magnetic north. Vertical control of the site was achieved by arbitrarily declaring the first day Instrument Height (HI) at 100.00 m, and then tying in with the witness pole BM-N-13-3-91 which was later determined to have an elevation of 192.68 feet (58.73 m) AMSL. A flagged nail was driven into the northeast side of a large cypress tree (adjacent to station number 18+00) at 60.45 m AMSL arbitrary elevation 100.02 m for future reference.

Proveniences for the artifacts recovered in the 100 percent surface collection were recorded using a transit and tape. A Lietz DT5A instrument was placed over baseline station 17+50 and all artifacts and units were measured for azimuth and distance from this point. Distance was measured to the nearest 0.1 meter and azimuth was recorded to the nearest minute. Grid south was designated 0° because the station numbers on the existing baseline stakes increased in that direction. Thus an azimuth of 270° corresponds to grid east, not magnetic west. Each artifact was given a provenience point number which was identical to its bag number in the survey field notes. In general, each point provenience corresponds to one artifact; however, in some areas, artifacts were located extremely close to one another (within 15 cm) and were bagged together. Elevations for each point provenience were recorded as well.

Two 1 x 1 m test pits were excavated, as stipulated in the initial Scope of Work. Test unit 1 was dug in two 10 cm arbitrary levels through the plow zone and revealed a feature. After drawing the plan view of this feature, it was excavated by trowel to sterile subsoil. Test unit 2 was excavated in four 10 cm arbitrary levels and a 30 x 30 cm deep test was dug in the southeast corner in two additional 10 cm levels. All soils removed were screened through 1/4 inch mesh to insure consistent artifact recovery. Sediments were described by color using Munsell Soil Color Charts, by texture, and by structure. Artifacts were bagged separately by level or feature provenience. A unit level form was completed for every level, as was a feature form for every feature. Both south and east profiles were recorded with scale sketches and photographs upon termination of the units. The units were backfilled following these activities and an orange pin flag with the unit number was placed at the southwest corner of each unit.

Following these investigations, consultations with Mr. Douglas Prescott indicated that the Scope of Work needed to be expanded in order to evaluate the significance of the site, given the presence of a sub-plow zone feature in unit 1. A second

delivery order was negotiated which included mechanized stripping of the plow zone to expose features. However, two events prior to stripping of the site led to a further revision in our view of the significance of the site and the Scope of Work. Most importantly, Mr. George Lewis, the site landowner and former resident, responded to a letter with a telephone call on February 10, 1992. He related the basic chronology of the site (1906-1969) to the author at this time. Just prior to this, the intact jar from feature 1 was identified in Toulouse (1971) as being *terminus ante quem* 1947. On the basis of this oral testimony and the less than 45-year-old feature, it was mutually determined by Mr. Douglas Prescott and the author that the site was probably not eligible for inclusion on the National Register of Historic Places as an individual structure. However, it was felt that substantial gains could be made in interpreting the archaeological data if Mr. Lewis was interviewed on site. At this time it was decided to rename the site "the Lewis site."

The final phase of the field work consisted of an oral interview with Mr. George Lewis and his friend and former neighbor Mr. Matthew Dawson. The interview was conducted on the morning of February 21, 1992 at the Lewis site. The author made detailed notes and sketches during the interview, which lasted approximately two hours. Much of the conversation centered not only on the Lewis farm and structures, but also on black owners and tenants along Cow Bayou from the 1910s to the present.

## LABORATORY ANALYSIS

Artifacts collected during the field phase were processed at the facilities of Garrow & Associates, Inc. in Memphis, Tennessee. The work done in the laboratory included washing, counting, analyzing, and labeling all specimens.

### Historic Artifact Analysis

The historic artifacts were analyzed using a system based on South's (1977) artifact patterning concept. Four attributes for historic artifacts were recorded: Group (this refers to South's Kitchen Group, Architecture Group, etc.), Class (essentially raw material, such as ceramic, glass, metal, etc.), Type (a general artifact type, such as pearlware), and Subtype (a specific artifact type, such as hand painted pearlware). The frequency of each category was computed against the artifact total for each site and any observed variation in the resulting frequencies was used to compare the results to known patterns and interpret site function(s). Historic site patterns will be discussed in greater detail below.

Kitchen ceramics are divided among three categories including earthenware, stoneware, and porcelain, with earthenware being the most commonly recovered

historic ceramic from tenant period components. The definition of late nineteenth- and early twentieth-century earthenware types is less readily accomplished than for earlier ceramics, however. Ceramic types that developed following pearlware are primarily characterized by a decrease in the degree of cobalt tinting and the eventual creation of "white" ceramics referred to in the archaeological literature as "whitewares." In 1813, C. J. Mason and Company of England introduced a new ceramic type known variously as "ironstone" or "stone china." This was an extremely high-fired ware which was normally vitrified, and thus technically a stoneware. However, vitrification did not always occur, and this characteristic cannot always be used with assurance to separate ironstones from other refined earthenwares. George Miller has noted (1980:2) that drawing distinctions between the various white-bodied wares of the nineteenth century is difficult to accomplish. Research by Miller (1980) indicates that surface decoration, more than ware type, determines the relative socioeconomic status of different historic ceramics and, following Miller, many archaeologists are now focusing their analyses on decorative motifs and shying away from the creamware-pearlware-whiteware-ironstone debate. However, work by Garrow (1982) at the Washington Civic Center site suggests a more accurate resolution to the difficulties in distinguishing whiteware from ironstone. Working with exceptionally large assemblages from tightly defined nineteenth-century contexts, Garrow (1982) was able to define a refined earthenware ceramic with a cream-tinted paste and an opaque white glaze which was susceptible to crazing. He noted that the paste of this ceramic was more large-grained than comparable ironstones and decorated earthenwares, and Garrow defined this type as cream-colored ware, assuming it was the least expensive plain earthenware ceramic referred to in the price-fixing guides cited by Miller (1980). Cream colored ware (referred to in shorthand as cc ware by Garrow) is described as exhibiting the following characteristics: a yellow to ivory body cast; a grainy paste which was apparently not as well-fired as ironstone, and was hence lighter by volume than other ceramics; and a glaze which is susceptible to crazing. Following Miller (1980), Garrow divides white-bodied late nineteenth-century ceramics into two categories: late refined earthenwares and ironstones. Cream colored ware and the various decorative types found on nineteenth century earthenwares (e.g., hand painting, transfer printing, edging, sponging, etc.) are included in the Late Refined Earthenware (LRE) category, while both plain and decorated ironstone are included in the ironstone group. The characteristics of ironstone recognized by Garrow (1982) include a refined, stark white, bluish, or gray paste; and a dense body and greater weight than comparable sherds.

The Lewis site yielded some refined earthenwares whose paste is similar to buff paste stoneware, as well as ironstone. These wares were sorted in another type, "ivory colored earthenware," based on the deep ivory color and porous nature of the paste. These sherds also commonly exhibit thicknesses and weight similar to another twentieth-century type: institutional ironstone. The author had originally called these wares "crude late refined earthenwares" but modified the nomenclature after discussions with Mr. Patrick Garrow. Ivory colored earthenware dates to the twentieth century. The earthenware sherds from the Lewis site were all late and

were sorted into two of the types mentioned above: ironstone and ivory colored earthenware. Sherds were then classified into subtypes based on surface treatment.

While earthenware contributed the majority of sherds from the site assemblage, 29 stoneware sherds were also recovered. Stonewares, generally employed for utilitarian purposes, were made throughout the United States. Four glaze types are prevalent on these wares: (1) alkaline, a sand and ash glaze indigenous to the Deep South, and used from ca. 1820 until the 1890s; (2) Albany slip, a clay slip glaze mined in the Albany, New York region, and used from the early 1800s to the present; (3) salt-glazing, which is one of the oldest known glazes applied to stoneware, and which had a focus in the northeastern U.S. but was found throughout the country; and (4) Bristol slip, a chemical and clay slip glaze which was made popular in the U.S. after 1884 and was used almost always exclusively after 1920 (Greer 1981:211-212). The combined use of Albany and Bristol glazes on single vessels probably dates from the period between 1884 and 1920 (Greer 1981:212). Stonewares were sorted into two types, based on temper: buff paste and gray paste, and into subtypes based on the surface treatments mentioned above. The subtypes cream glazed, unidentified brown slip, and blue banded were utilized to accommodate several sherds whose surface treatments were not covered in the above descriptions.

In addition to refined and coarse earthenware ceramics, a large quantity of bottle glass was recovered from the site. While most early glass was free-blown, mold-blown and machine-made bottles became common during the nineteenth and twentieth centuries. Mold-blown glass occurs after ca. 1818. Machine made bottles were used in commercial production beginning in 1893, although fully automatic devices were not introduced until 1917 (Jones and Sullivan 1989:39). All of the identifiable bottle glass recovered from the Lewis site is machine made. Of particular note are several pieces of solarized amethyst glass. "Sun colored amethyst," produced with manganese, was most common in the period including the last quarter of the nineteenth century until World War I (Jones and Sullivan 1989:13). Amethyst glass thus provides a *terminus ante quem* date of 1916 when found in historic site collections.

Architectural artifacts recovered from the site included whole and fragmented unglazed brick. During the controlled surface collection, only brick fragments which were whole or at least one-half intact were recovered, as there was a large amount of fragmentary brick scattered over the site area. All brick fragments were recovered from the screened test units and features. No glazed brick was recovered from the site. The unglazed brick was sorted into three categories, based on temper, color, and markings. Category I is described as weak red (10R 4/4) brick with homogenous paste and a sandy, coarse exterior. Whole category I bricks measure 7.75" x 3.5" x 2.0" and have a 0.25" recessed groove measuring 5.5" x 1.75". A raised maker's mark "O C S & Co." is present in this groove. Category II brick is described as weak red (10R 4/3) on the exterior and with a coarse, quartz reddish brown (2.5YR 5/4) paste. Whole category II specimens measure 8.5" x 4.0" x 2.25" and have the marking "L F

B W X S" impressed on one side. Category III brick is identical to category I brick, except that it lacks the recessed groove.

In addition to ceramics and bottle glass, nails generally constitute one of the largest components on nineteenth-century sites. Nails can generally be separated into two types for this period: (1) cut nails, which were cut from flat sheets of metal and feature two tapering edges and two parallel edges, and (2) wire nails, which are round and are processed from metal cylinders. A recent discussion of nail types and frequencies by Orser et al. (1987:549-558), suggests that the relative proportion of cut nails to wire nails can serve as an index to the age of a structure and site. They propose that sites containing almost entirely cut nails will predate 1855. Sites featuring more cut nails than wire nails should date to the period from 1855 to ca. 1880. Sites featuring a relatively even mixture of wire and cut nails should date to the period from 1880 to 1890, and sites featuring more wire nails than cut nails post-date 1900. At the Lewis site, only wire nails were recovered.

## V. RESULTS

The following chapter presents the results of the literature and records search and the fieldwork conducted for the project. Each aspect of the study is discussed separately below in the order in which the tasks were conducted.

### LITERATURE AND RECORDS SEARCH

#### Arkansas Site Files

Information on recorded archaeological sites within 3 km of the Lewis site was obtained through correspondence with the Registrar of the Arkansas Archeological Survey, Fayetteville. A single prehistoric site has been recorded within this radius, which is known to a local collector as the Troublesome Lake site. This site was recorded in February 1984 by Mr. John House of the Pine Bluff station of the Arkansas Archeological Survey and revisited by him in March 1985. The Troublesome Lake site consists of three concentrations of daub, sherds, and lithic debris on low rises on a relic point bar ridge beside a small lake. Diagnostic artifacts indicate a farmstead or hamlet occupation during the late Mississippian period, with a waddle and daub structure at each locus. Low frequencies of grog tempered sherds and a stemmed dart point indicate an earlier Baytown period occupation as well. There is no indication of any historic period occupation at the site.

#### GLO Plat Maps

The project area lies immediately west of the baseline between Range 3 East and Range 4 East in Township 3 North. Copies of the original GLO Plats of both Range 3 and 4 East were obtained through correspondence with the Commissioner of State Land, and the relevant portions of these maps are presented in Figure 2. The Range 3 East map is on the left and is obviously less skillfully drawn and in poorer condition than the Range 4 East map on the right. The Lewis site is shown in its position on the west bank of Cow Bayou in the SE 1/4 of Section 24.

The Range 3 East Plat sheet information is barely legible at the bottom of the sheet (not shown in Figure 2). The baseline for this Township and Range was apparently surveyed in 1815 and the surveyors would have passed very close to the site area at that time. The letter "M" denotes marsh, and one can see that much of the surrounding area was considered such, including the 1/4 section in which the Lewis site is located. Sandy Slough may be represented by the squiggly line beneath the M



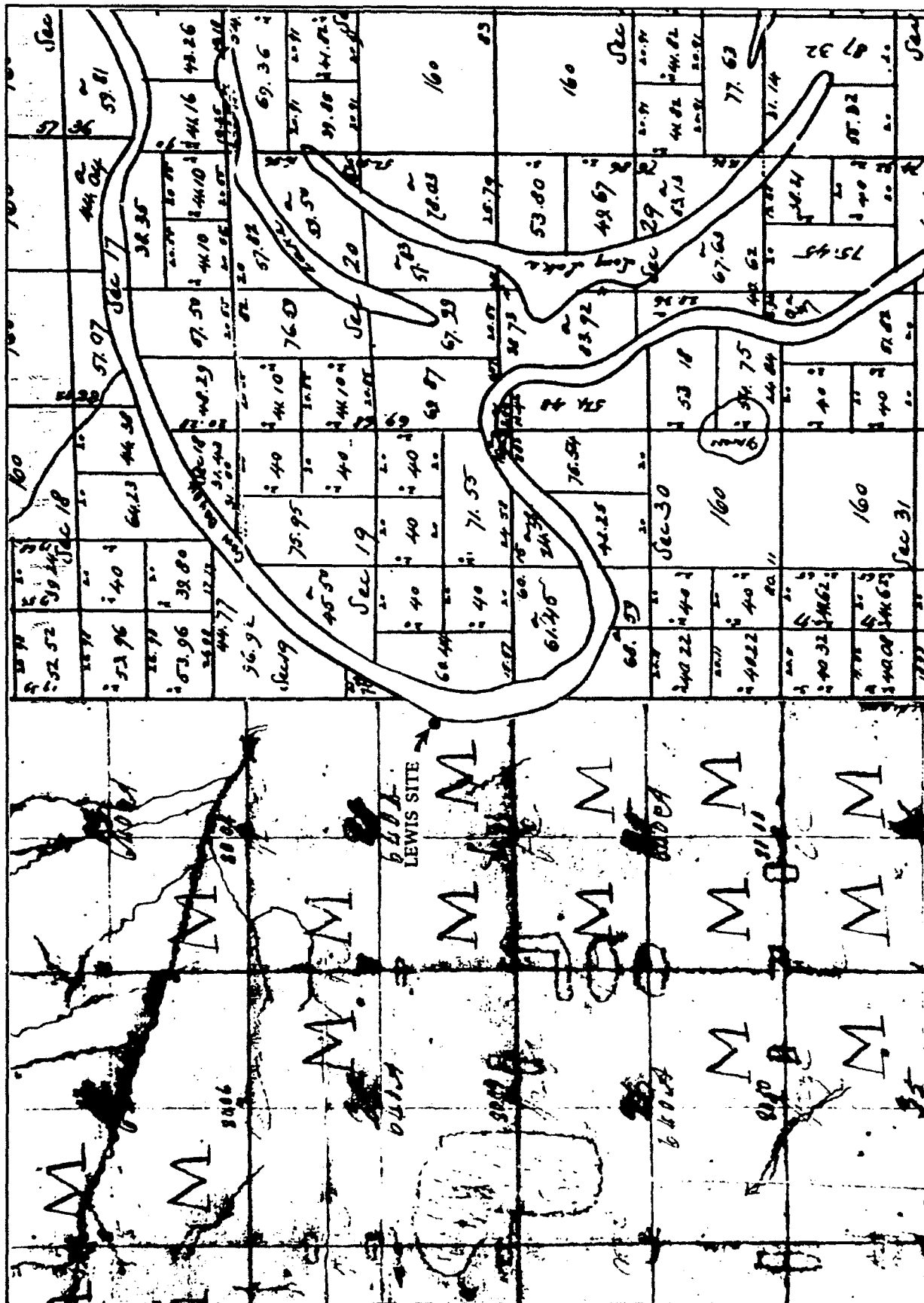


Figure 2. General Land Office (GLO) Plat Maps Showing Project Area Location.

in the same 1/4 section. The large, branching stream depicted north of the site is apparently a poor rendering of the upper portion of Cow Bayou.

The Plat of Range 4 East was drawn in 1842 and is of much better quality than the preceding one. The east and south baselines of this Township and Range were surveyed in 1816, and the subdivision of this tract was accomplished by John E. Graham in March and April of 1834. This plat does not use the "M" symbol, so one can only postulate that the tracts which were left in 160 acre lots were somewhat inaccessible. Note that some of the section lines between the two Ranges do not exactly match. These inaccuracies are still shown on the 1984 USGS Soudan quadrangle (see Figure 1). It is interesting to note the small 40-58 acre lots on the south and west bank of Cow Bayou and their correspondence with standing tenant structures shown on the USGS 1963 Park Place 15 minute topographic map of the area.

### 1963 Park Place 15 Minute Topographic Map

The 1963 Park Place USGS 15 minute topographic map was examined and a portion was copied from an original housed at C.H. Nash Museum, Memphis. Importantly, this map shows two structures standing on the Lewis site and the position of the old county road between the structures and the St. Francis Floodway (Figure 3). One of the structures is located on a topographic high, and the second is found approximately 100 m to the south, on a lower portion of the site. Neither of these structures can be found on the Soil Survey 1974 aerial photograph of the Lewis site area (Gray 1977:Sheet 13). The two structures are shown in clear terrain. Cleared tracts appear to follow the natural levees. Note that west of the Lewis acreage, the flats are still covered in forest. Two additional structures are located immediately north of the Lewis site and an unnamed drainage, which corresponds to the proposed scour repair. A single structure is shown at this location on the Soil Survey 1974 aerial photograph. Evidently, the trestle bridge was still standing in 1974 as well.

Further study of the 1963 map allows for additional comments on the site vicinity. The old county road is shown as two solid lines on the west side of the floodway. However, all the structures, including the Shady Grove Church, located on the east side of the floodway and along the continuation of the old Cow Bayou levee road, are found beside a dashed line road. This indicates that west of the floodway the road had been improved, possibly graded, and that the east side remained unimproved. This grading may have been conducted in conjunction with the construction of the St. Francis Floodway ca. 1959. Note that the levee is still under construction at this time and that there are three borrow pits in section 19. Also, the St. Francis Floodway and Cow Bayou are labeled M.L. 1816 and M.L. 1834, meaning that these channels were meander lines of the St. Francis River during the early nineteenth century.

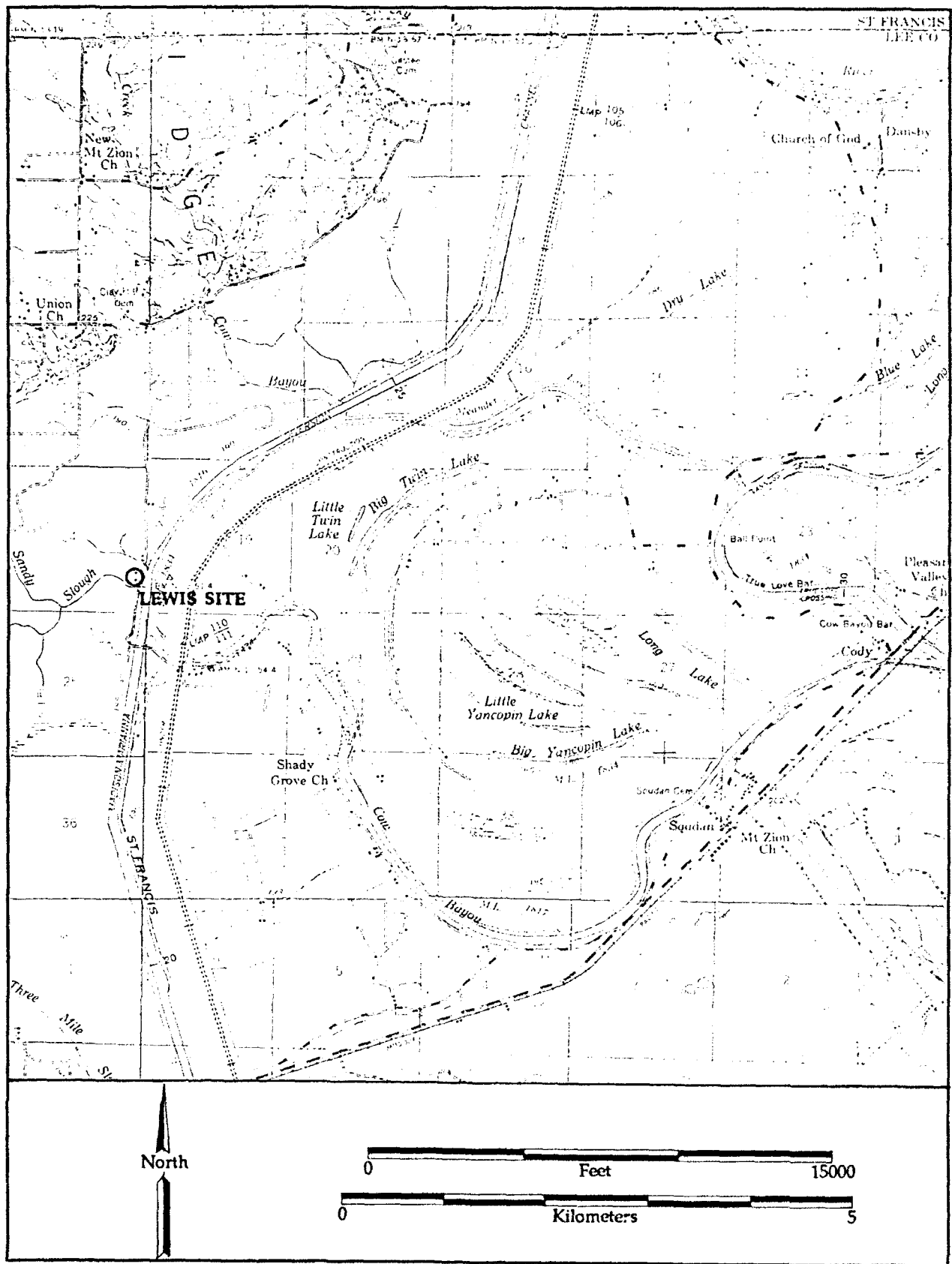


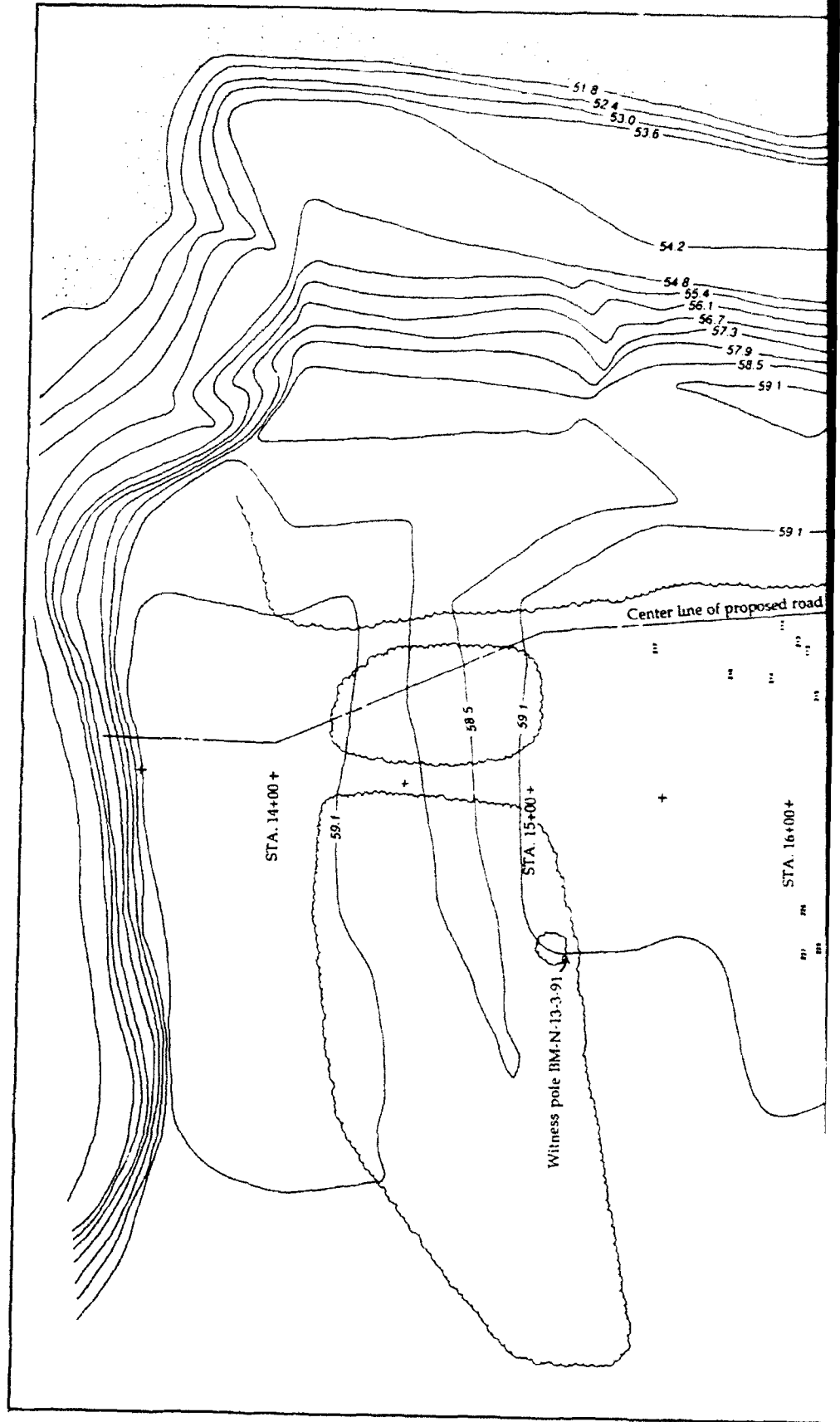
Figure 3. Project Location on the USGS 1963 Park Place 15 Minute Series Topographic Map.

## CONTROLLED SURFACE COLLECTION

The 100 percent controlled surface collection resulted in the recovery of 471 historic artifacts from the site. The recovered artifacts and their respective proveniences are presented as Appendix 1. When referring to this appendix, the two letter code "Group & Class" column is read as follows: the first letter refers to the artifact group (A=Architecture, C=Clothing, K=Kitchen, M=Miscellaneous, P=Personal, R=Arms, and Z=Activities) and the second letter refers to the artifact class, usually raw material (B=Biological, C=Ceramic, G=Glass, M=Metal, P=Plastic, R=Rubber, and S=Stone). For example, KG is Kitchen glass, AS is Architectural stone, and CM is Clothing metal. The abbreviation "m.m." refers to machine made items. A summary of the recovery from the controlled surface collection artifacts is presented below in Table 1.

The distribution of the controlled surface collection point proveniences is shown in Figure 4. The 471 artifacts were recovered from 239 point proveniences, which means that there are approximately two artifacts per point shown in Figure 4. The maximum extent of the scatter is 150 m north-south by 75 m east-west (11,250 m<sup>2</sup>). The scatter is obviously concentrated east of the datum and to the edge of the field, over an area of approximately 28 m east-west by 18 m north-south (504 m<sup>2</sup>). A secondary concentration noted in the field lies approximately 40 m north-northwest of the datum, across a low, muddy strip. This secondary concentration covers a slight rise about 15 m in diameter (192 m<sup>2</sup>). The area to the south of the main concentration appears to have a nearly random distribution, while to the north, the scatter tapers out, but contains a small third cluster. The third cluster lies approximately 38 m northeast of the datum and covers an area of 11 m<sup>2</sup>. Interpretations and comparisons of these varying concentrations will be offered in a subsequent section, in light of the ethnographic data provided by Mr. Lewis.

The majority of items recovered (n=371, or 78.8%) are kitchen related. Glass (n=236, or 63.6% of kitchen artifacts) is the major artifact class in the kitchen assemblage and all of the identifiable kitchen glass recovered from the Lewis site is machine made. Within the glass class, bottle glass is the dominant type (n=193, or 81.8%), followed by table glass (n=24, or 10.2%) and other glass (n=19, or 8.1%) which consisted wholly of milk glass canning lid seal fragments. Subdivision of the bottle glass type into subtypes based on color revealed the following counts: clear=130, amber=23, aqua=20, dark blue=9, milk=5, light blue=4, amethyst=1, and green=1. Of particular note is the single piece of solarized amethyst glass. "Sun colored amethyst," produced with manganese, was most common in the last quarter of the nineteenth century, and generally dates before World War I (Jones and Sullivan 1989:13). Much of the clear, amber, and aqua bottle glass recovered from the site is modern and appears to be broken beverage bottles. The dark blue bottle glass probably represents inexpensive, broken, "over the counter" medicine containers. The canning





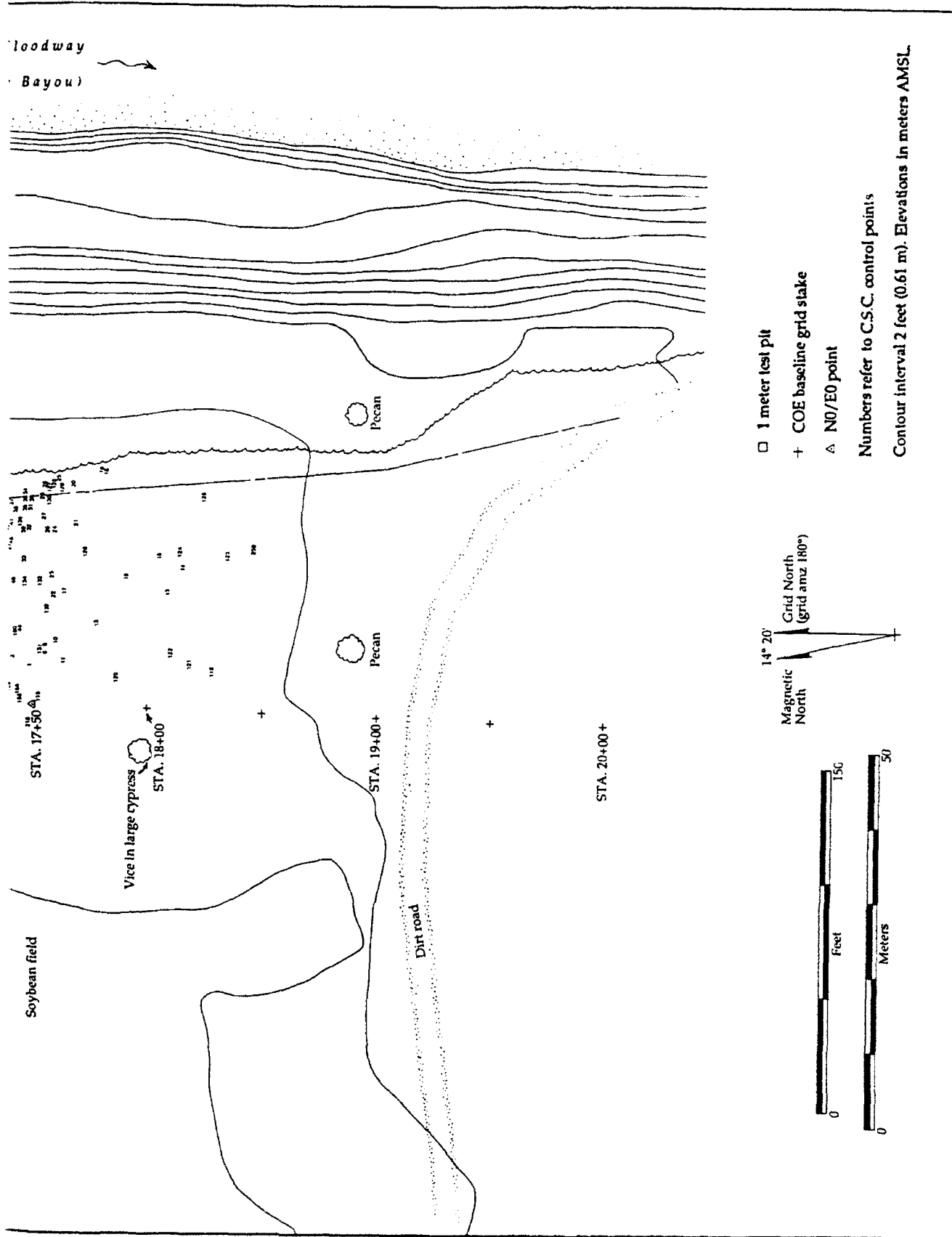


Figure 4. Detailed Topographic Map of the Lewis Site Showing Test Units and Surface Collection Artifact Locations.

Table 1. Controlled Surface Collection Artifact Summary.

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KITCHEN GROUP

Glass

Machine made bottle glass	193
Machine made table glass	24
Milk glass canning seal lid fragments	19

Ceramics

Earthenware	95
Stoneware	29
Porcelain	9

Biological

Bone	<u>2</u>
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Subtotal 371

ARCHITECTURE GROUP

Stone

Machine made brick, category I	20
Machine made brick, category II	4
Machine made brick, category III	1

Glass

Plate glass	17
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Metal

Pane divider	2
Window latch	1

Ceramic

Tile	<u>1</u>
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Subtotal 46

ACTIVITIES GROUP

Metal

Farm implement part	8
Hardware	5
Tools	3
Auto part	2
Light bulb base	2

Glass

Auto safety glass	5
Lamp glass	1
Marble	1
Auto headlight glass	1

Other

White porcelain insulator	2
Inner tube fragment	1
Foam weather stripping	<u>1</u>

Subtotal 32



TABLE 1. (cont.)

CLOTHING GROUP		
Shoe heels and heel fragments		7
Buttons (metal/ceramic/plastic)		<u>3</u>
	Subtotal	10
ARMS GROUP		
Metal 12 ga. shell base		1
PERSONAL ITEMS GROUP		
Plastic comb fragment		1
MISCELLANEOUS AND UNIDENTIFIED GROUP		
<u>Metal</u>		7
<u>Glass</u>		2
<u>Plastic</u>		<u>1</u>
	Subtotal	10
TOTAL		471

lid seal fragments indicate food storage activities. Overall, the kitchen glass indicates an occupation of the site during the early years of the twentieth century.

Ceramics are the second most frequently represented class of kitchen group artifacts (n=133, or 35.8%) and are themselves dominated by the earthenware category (n=95, or 71.4%). Table 2 details total ceramic counts by types and subtypes. Ironstone types clearly dominate the earthenware assemblage (n=85, or 89.5%), with plain white ironstone being the most abundant subtype. Eight decorated ironstone sherds were collected, of which all but the flow blue piece are twentieth-century types (Figure 5). The flow blue piece could have been manufactured in the late nineteenth or early twentieth centuries. It is a "revival" type, imitating an older flow blue pattern on pearlware (Figure 5f). The two pieces of pink glazed ironstone may have been manufactured in Europe in the 1920s and appear to be from the same vessel (Figure 5b). Blue ironstone is represented by two pieces, one the handle of a pitcher and the other a floral molded pattern (Figure 5a). Institutional ironstone or "Hotelware" (n=2, or 2.1%) is also a late type restricted to the twentieth century (Figure 5i). Two late decal types were recovered, including a portion of an alphabet cup or bowl (Figure 5e) and a very late green/brown decal ironstone flatware sherd (Figure 5j). The remainder of the earthenware is typed as ivory colored earthenware (n=10, or 10.5%). Three colors of glazes were observed on the specimens, which all date to the twentieth century. Two of the blue/bluish glazed ivory colored earthenware sherds also have molded "wings" and appear to be from the same bowl or sugar cup (Figure 5h).

Stoneware is the second most frequent kitchen ceramic category (n=29, or 21.8%). The majority of the sherds are of the buff paste type (n=27), with only two gray paste stoneware sherds being recovered. The dominance of white Bristol slip interior/

Table 2. Controlled Surface Collection Ceramic Counts by Type.

EARTHENWARE

Ironstones

White ironstone	
Plain	63
Molded	9
Burned	1
Decorated white ironstone	
Pink glazed ironstone	2
Flow blue	1
Green/blue overglaze	1
Green/brown decal	1
Alphabet decal	1
Blue transfer print	1
Light blue sponged	1
Blue ironstone	
Molded	2
Institutional/hotelware	
Green banded	2

Late Refined Earthenwares (LRE)

Ivory colored earthenware	
Blue/bluish glaze	5
White glaze	3
Cream glaze	<u>2</u>

Subtotal 95

STONEWARE

Buff Paste Stoneware

Bristol slip interior/exterior	12
Albany interior/Bristol exterior	9
Unidentified brown interior/exterior	3
Unidentified brown interior/unglazed exterior	1
Churn lid, cream glaze interior/unglazed exterior	2

Gray Paste Stoneware

Gray salt glazed exterior/unidentified brown slip interior	1
Blue banded exterior	<u>1</u>

Subtotal 29

PORCELAIN

Soft Paste

Banded	2
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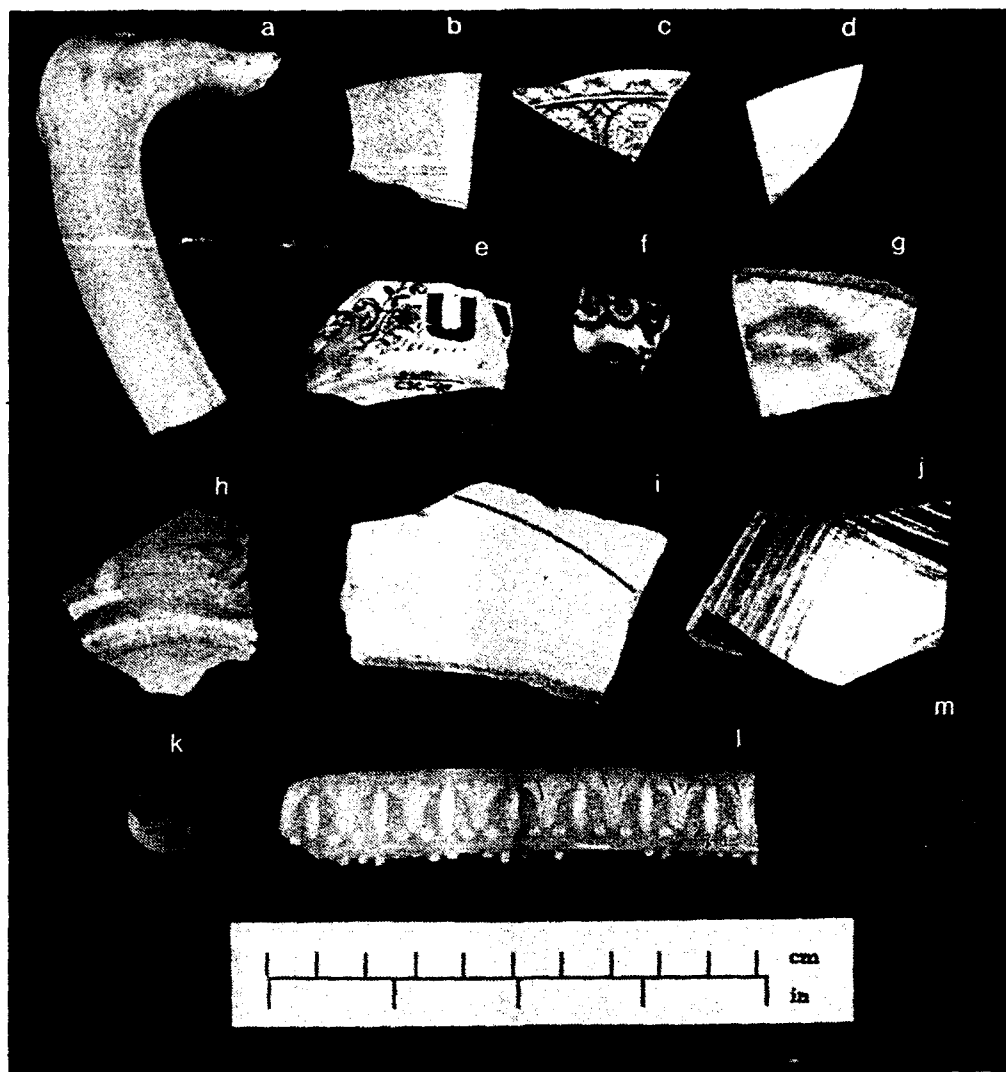
Hard Paste

Plain	6
Molded	<u>1</u>

Subtotal 9

TOTAL

133



a) Blue Molded Ironstone; b) Pink Glazed Ironstone; c) Blue Transfer Print Ironstone; d) Light Blue Sponged Ironstone; e) Alphabet Decal Ironstone; f) Flow Blue Ironstone; g) Green-Blue Overglazed Ironstone; h) Ivory Colored LRE; i) Institutional/Hotelware; j) Green/Brown Decal Ironstone. Glass: k) Marble. Plastic: l) Comb Fragments. Metal: m) Brass Military Coat Button.

Figure 5. Selected Artifacts from the Lewis Site.

exterior sherds is suggestive of the post-1920s era. The nine stoneware sherds exhibiting a combination of Albany and Bristol glazes are also temporally sensitive, suggesting a date between 1884 and 1920. In this case, the mean date of 1902 is probably more accurate.

Porcelain was the least frequently represented kitchen ceramic category ( $n=9$ , or 1.9%). The porcelain recovered is not as temporally sensitive as the earthenware or stoneware categories, and one can merely posit a late nineteenth/early twentieth century date for these wares. Porcelain is commonly found in low frequencies on tenant period sites in eastern Arkansas (Buchner and Childress 1991; Buchner and Weaver 1990). As a whole, the ceramic assemblage is consistent with the bottle glass assemblage in dating the earliest occupation of the Lewis site to the first decade or two of the twentieth century.

The architectural group is dominated by brick ( $n=25$ , or 54.3%), with category I (machine made brick bearing all or portions of the marking "O C S & Co.") being the most frequently represented brick subtype. A whole brick from category I is illustrated in Figure 6 (top), which was recovered from control point 223. Brick categories II and III are also machine made, but with more variation in tempering and color. Figure 6 (bottom) shows an example of whole category II brick, from control point 200. These all likely date from the early to mid twentieth century.

Plate glass constitutes the second largest class of artifacts from the architectural group ( $n=17$ , or 37.0%). Plate glass thicknesses have been used experimentally to date tenant period structures at the Millwood Plantation in South Carolina (Orser 1988). However, comparative data from the Mississippi Valley is unreported or obscure, so only the measurements of the flat glass are presented.

Other architectural items recovered in the controlled surface collection were of low frequency ( $n=4$ , or 8.7%). Metal items included two pieces of a rusted pane divider and one whole non-ferrous window latch. One hexagonal 1" white ceramic floor tile was found. These items are all machine made and date to the early to mid twentieth century.

The activities group is the third most frequently represented artifact group in the surface collection ( $n=32$ , or 6.8%). The metal class dominates the group ( $n=20$ , or 62.5%), with a wide range of activities being represented. Large ferrous pieces of mechanical farm implements, ferrous hardware, and tools were scattered throughout the site. Interestingly, no horse or mule shoes were recovered; when contrasted with the relative abundance of mechanized implement parts/auto parts, this also suggests a twentieth-century occupation. Glass was the second most common class of artifact within the activities group, with 6 of 8 pieces representing automobile glass. The trace presence of lamp glass ( $n=1$ ) suggests the use of fuel oil lamps at the site. A single red/blue/white swirled glass marble with 5/8" diameter was recovered (see Figure 5k). Marbles of this diameter are considered playing

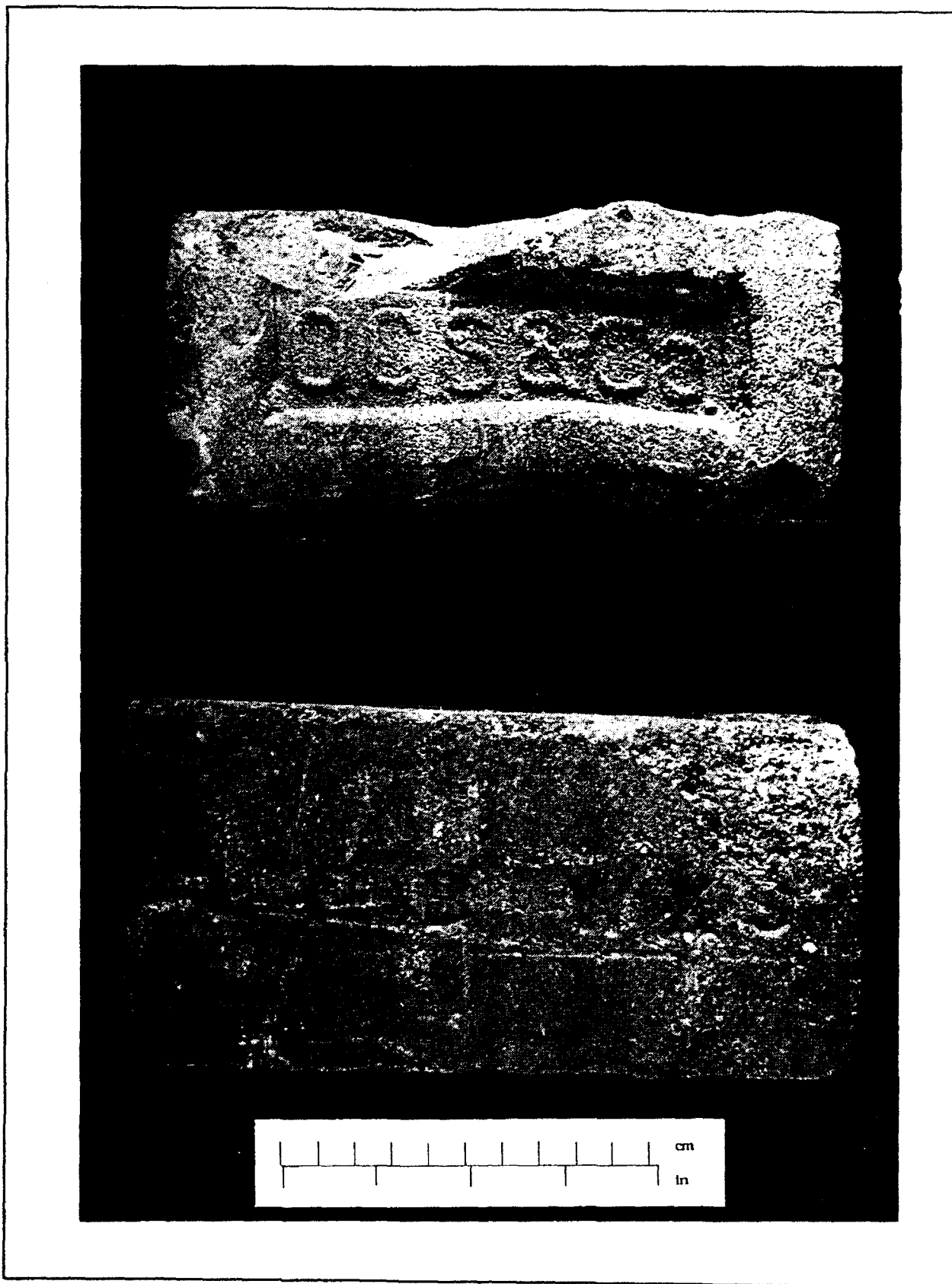


Figure 6. Category I (Top) and Category II (Bottom) Whole Brick Specimens.

marbles (Kwas 1990:248). Swirled glass marbles are one of the earliest types of machine made glass marbles, and date mainly from about 1902-1933 (Randall and Webb 1988:47). Other activities group artifacts include foam weather stripping (evidently fairly recent), an inner tube fragment with a circular patch cut out of it, and two small white porcelain electrical insulators. The insulators suggest that electrical wires once ran to the site; however, no power poles are presently located nearby. The porcelain insulators are considered twentieth-century cultural materials.

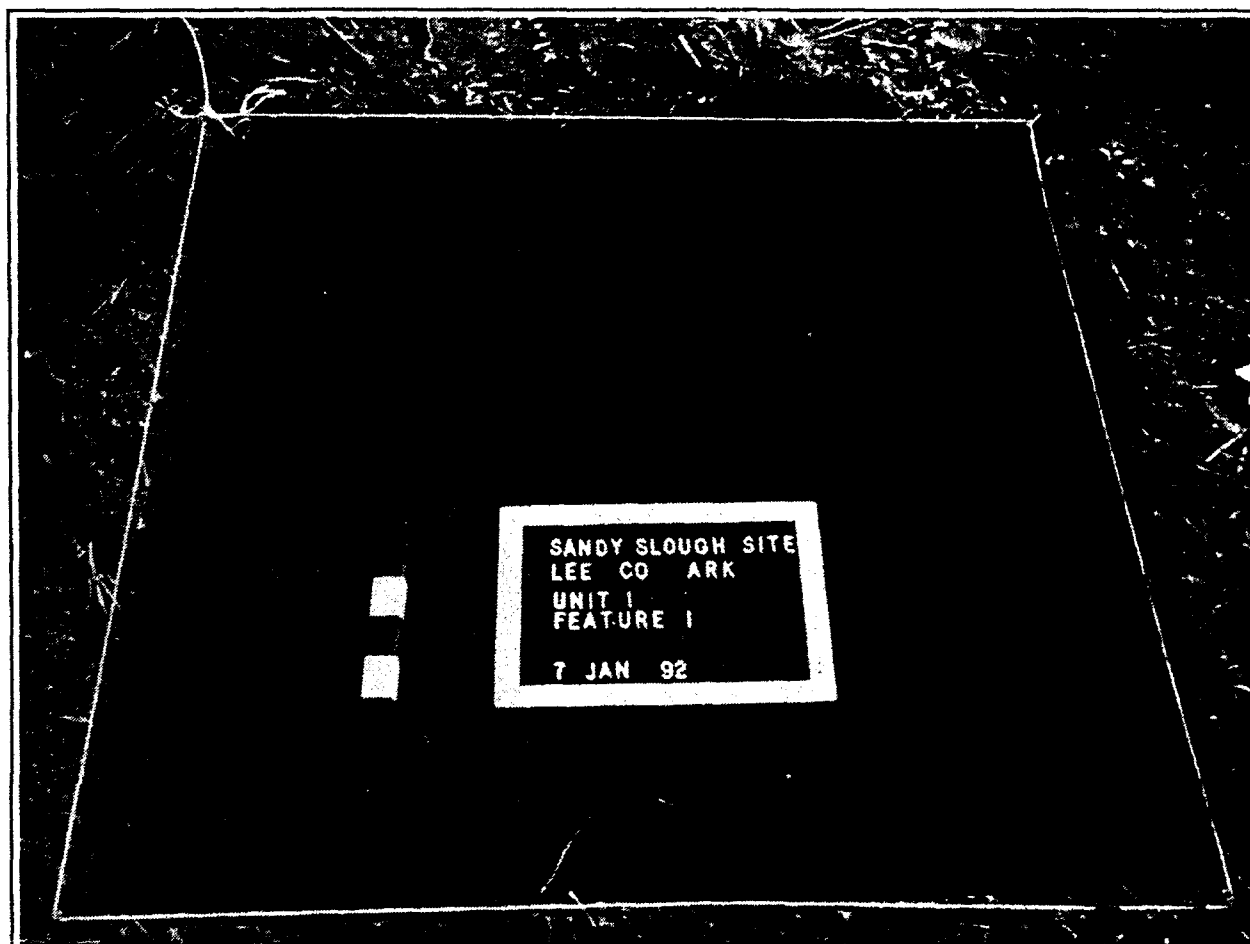
The lowest frequency artifact groups were the clothing, arms, and personal groups. The arms group consisted of the metal base of a 12 ga. shell, obviously of mid to late twentieth-century manufacture. A cream colored plastic comb fragment was recovered, which cross-mends with a comb fragment from test unit 1 (see Figure 5l). The clothing group is fairly well represented (n=10, or 2.1%) and consists mainly of rubber shoe heels or heel fragments. Three buttons were recovered, one each of metal, ceramic, and plastic. The metal button is a 1.1 inch diameter greenish-corroded brass military coat button with the U.S. eagle and shield (see Figure 5m). Coat buttons of this type are known as general service buttons and came into use in the U.S. Army after 1908 (Johnson 1948a:65, 68; 1948b:Plate 26).

Miscellaneous and unidentified artifacts account for the remainder of the controlled surface collection (n=10, or 2.1%). Unidentified ferrous objects account for the majority of this total (n=7).

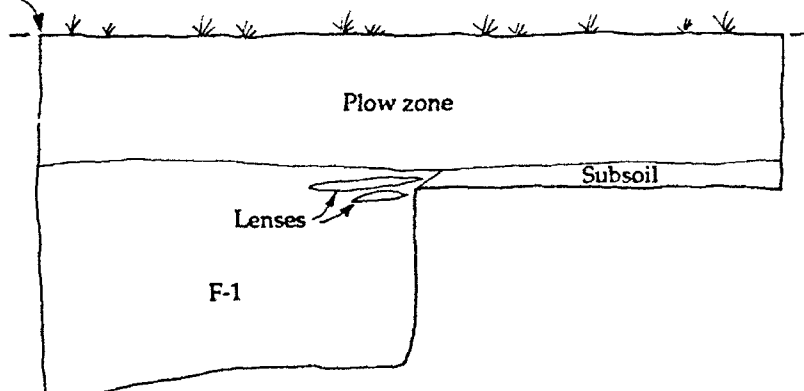
The majority of the artifacts recovered in the controlled surface collection have manufacture dates beginning in the early twentieth century and extending to the present. A few artifacts, namely the flow blue "revival" ironstone sherd and the sherds exhibiting both Bristol and Albany slips, have manufacture dates which begin in the late nineteenth century and extend into the twentieth century. It is suggested here that the site dates from the twentieth century only, and that the possible late nineteenth-century artifacts are the result of temporal lag. Given the poverty and isolation of rural eastern Arkansas, a 20 to 30 year temporal lag between manufacture and introduction of certain ceramics to the area household inventories is not unreasonable.

## TEST UNIT 1

Test unit 1 was excavated as a 1 x 1 m unit on January 7 and 9, 1992. The results of excavations are presented in Table 3. Unit 1 was intuitively placed within the area of highest surface artifact density, which also lies on the center line of the proposed gravel road (see Figure 4). This area has north-south plow furrows. The southwest corner of unit 1 was 26.08 m and 243°13' from N0 E0. Unit 1 yielded artifacts from the plow zone and from an artifact filled depression designated feature 1 (F-1).



elev = 59.98 m AMSL



0 Centimeters 50

Plow zone - Dark brown (10YR 3/3) silt loam

Subsoil - Brown (10YR 4/3) silt loam

F-1 - Brown (10YR 4/3) mottled with dark yellowish brown (10YR 4/4) and light brownish gray (10YR 6/2) silt loam

Lenses - Light brownish gray (10YR 6/2) silt

Figure 7. View of F-1 Excavated in Unit 1, Facing South, and Unit 1 South Wall Profile Map.

Unit 1 consisted of two strata and a feature (Figure 7). The plow zone extended to 16-17 cm below the surface and was composed of homogenous dark brown (10YR 3/3, moist) silt loam with charcoal particles and artifacts. Below the plow zone was sterile subsoil which was composed of slightly compact brown-dark brown (10YR 4/3, moist) silt loam.

Table 3. Summary of Artifacts Recovered from Test Unit 1.

		<u>L-1</u>	<u>L-2</u>	<u>F-1</u>	<u>TOTAL</u>
<b>KITCHEN GROUP</b>					
	<u>Ceramics</u>				
	Stoneware	1	0	0	1
	Earthenware	5	9	1	15
	Porcelain	1	0	0	1
	<u>Glass</u>				
	Intact jar	0	0	1	1
	Bottle	138	111	16	265
	Table	0	3	2	5
	Pharmaceutical bottle	0	1	2	3
	<u>Biological</u>				
	Bone	0	1	5	6
	Charcoal	0	4	16	20
	Shell	1	0	0	1
	<u>Other</u>				
	Metal can key	0	1	0	1
	Subtotal	146	130	43	319
<b>ARCHITECTURE GROUP</b>					
	<u>Stone</u>				
	Brick fragments	5	25	17	47
	Cement	0	12	0	12
	<u>Metal</u>				
	Wire nails	12	27	2	41
	Wire nail fragments	30	60	31	121
	Roofing nails	1	3	0	4
	Fencing staple	2	12	2	16
	<u>Glass</u>				
	Plate glass	42	34	6	82
	<u>Other</u>				
	Tar paper	0	4	0	4
	Subtotal	92	177	58	327
<b>ACTIVITIES GROUP</b>					
	Hardware	2	10	0	12
	Auto safety glass	3	0	0	3
	Lead weights	0	0	2	2
	Wire fencing	1	0	0	1
	Battery node	0	1	0	1
	Light bulb glass	0	0	1	1
	Subtotal	6	11	3	20



Table 3. (cont.)

	<u>L-1</u>	<u>L-2</u>	<u>F-1</u>	<u>TOTAL</u>
CLOTHING GROUP				
Shoe heel fragments	1	1	0	2
Button (shell/plastic)	<u>0</u>	<u>2</u>	<u>0</u>	<u>2</u>
Subtotal	1	3	0	4
PERSONAL ITEMS GROUP				
1909 wheat penny	1	0	0	1
Cream plastic comb fragment	0	1	0	1
Small tin of ointment	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>
Subtotal	1	2	0	3
ARMS GROUP				
.38 cal. lead bullet	0	1	0	1
MISCELLANEOUS AND UNIDENTIFIED GROUP				
Coal	3	0	0	3
Iron straps	0	0	2	2
Burned earth	0	0	1	1
Unidentified metal	5	18	34	57
Unidentified plastic	0	1	1	2
Unidentified glass	0	2	0	2
Unidentified				
(possible particle board fragment)	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>
Subtotal	8	21	39	68
TOTAL	254	345	143	742

Feature 1 was identified at the base of level 2 (20 cm below surface) along the south wall of the unit, with maximum dimensions of 50 cm north-south and 85 cm east-west. Two zones were apparent within the feature. The first zone was a roughly oval 35 x 30 cm area in the center of F-1, consisting of an ashy, light brownish gray (10YR 6/2, moist) silt loam mottled with dark brown (10YR 3/3, moist) plow zone. Below this was a ring of darker, more artifact-rich sediment surrounding the first zone, designated the "contact zone." The contact zone was described as dark brown (10YR 3/3, moist) silt loam lightly mottled with brown-dark brown (10YR 4/3) silt loam and including many charcoal particles, brick dust, and very soft mortar bits. The lighter, ashy central area was first excavated and found to contain relatively few artifacts (three brick fragments, three small bone fragments, one piece of unidentified red plastic, one piece of clear table glass, and one piece of clear machine made bottle glass). This lighter area extended 15 cm to the west, under the contact zone, to a depth of 53 cm below surface and was characterized by thin lenses or varves of light brownish gray (10YR 6/2) and dark brown (10YR 3/3) silt, which are suggestive of episodic deposition, perhaps in an abandoned rodent burrow or dog wallow. The remainder of feature 1, the contact zone, was then excavated and found to contain the majority of artifacts listed in Table 3 (n=134). The contact zone

extended to a maximum depth of 49 cm below surface in the southeast corner of the unit.

Of interest is an intact glass jar found at the bottom of feature 1 on the south wall. The jar has threads for a screw top and has raised letters: "McCORMICK & CO...BALTIMORE." The sides of the jar taper inward slightly, the maximum height is 4.6 inches, the diameter of the mouth is 1.85 inches, and the fluid capacity is 8 oz. A. Schilling & Co. of San Francisco, produced jars for tea, coffee, spices, and extracts from 1881 to 1947. In 1947, the McCormick's from Baltimore bought the business and still produce similar products (Toulouse 1971:52-53). The jar recovered from feature 1 is thus probably a tea or spice jar produced after 1947, indicating that the feature could only be 45 years old at a maximum. A further confirmation of a twentieth-century date for feature 1 is the presence of 31 wire nail fragments.

A total of 742 artifacts were recovered from the plow zone and feature 1 (see Table 3). In contrast to the controlled surface collection, the architecture (n=327, or 44.1%) and kitchen (n=319, or 43.0%) groups are found in roughly equal proportions. Following the trend shown in the controlled surface collection, glass is the overwhelmingly dominant class within the kitchen group (n=274, or 85.9%). All of the kitchen glass is machine made. Two pieces of solarized amethyst glass were recovered from level 2, which date prior to 1916. Ceramics were distributed fairly evenly in the plow zone, with level 1 containing 7 pieces and level 2 containing 9. A single piece of plain white ironstone was recovered from feature 1. Earthenware was most frequent type in the plow zone (n=14), with the plain white ironstone type accounting for all of the total earthenware, except for one decal ironstone sherd and one ivory colored earthenware sherd with blue glaze. The ivory colored earthenware was also molded with a wing pattern and evidently is from the same vessel as a similar sherd from the controlled surface collection (see Figure 5h). Stoneware from unit 1 consisted of a buff paste sherd with an unidentified brown slip interior/exterior, and the one piece of porcelain was plain hard paste. Most of the ceramics are non-diagnostic, but indicate a late nineteenth to early twentieth-century component; however, the ivory colored earthenware sherd and the decal ironstone date to the twentieth century.

Metal is the dominant class within the architecture group. Wire nails and wire nail fragments are the most common metal subtypes (n=162, or 89.0%). Orser et al. (1987:549-558) suggest that sites which show all wire nails date after ca. 1900. Four roofing nails were recovered as well, none of which had a lead head which would predate the turn of the century. A significant number of fencing staples were also recovered (n=16), with level 2 (lower 5 cm of plow zone) having the heaviest count. The fencing staples were machine made wire staples. The glass class consisted wholly of plate glass (n=82, or 25.1%). Architectural stone items consisted of fragmentary brick and cement. The brick color was similar to that of the machine made brick category I from the controlled surface collection. Omitting architectural stone, the architectural group still contains a significant quantity of artifacts (n=268).

The high number of architectural artifacts in an area of surface concentration suggests the presence of a structure at this location. An informant later confirmed that the unit was placed within the boundaries of the house, probably north of the chimney base (see Figure 4).

The proportions of minority artifact groups are similar to the results obtained in the controlled surface collection, with activities group (n=20, or 2.7%) followed by clothing group (n=4, or 0.5%), personal items group (n=3, or 0.4%), and arms group (n=1, or 0.1%). Hardware of various kinds is the most frequent type in the activities group. Two tubular lead weights, probably used on "trout" lines, were recovered from feature 1 (one inside the intact jar). The weights have masses of 25.5 g (0.90 oz) and 38.6 g (1.36 oz). Auto safety glass and wire fencing were recovered from level 1 only. The clothing group consisted of two more rubber shoe heel fragments, as well as a two hole shell button 0.5 inches in diameter, and a four hole plastic button 0.561 inches in diameter. All clothing group artifacts were recovered from the plow zone. The personal items group included a 1909 wheat penny and a comb fragment, both from the plow zone. The comb fragment cross-mends with the comb fragment from controlled surface collection point 63 (see Figure 51). Unit 1 also contained a fair percentage of miscellaneous and unidentified items (n=68, or 9.2%), mainly unidentified ferrous metal objects.

The artifact profile from unit 1, the two pieces of amethyst glass, a 1909 penny, and the presence of only wire nails provide evidence for occupation of the site from the early part of the twentieth century. A late nineteenth-century date is not strongly supported. Feature 1 with the McCormick spice jar, indicates that the site deposits were still being formed as late as 45 years ago.

## TEST UNIT 2

Test unit 2 was excavated as a 1 x 1 m unit on January 9, 1992. This unit was also placed near the centerline of the proposed road, with its northwest corner 5 m south of the southeast corner of unit 1. The southeast corner of unit 2 lies 26.95 m and 256°31' from N0 E0 (see Figure 4). The field surface in this location was also furrowed in a north-south direction and contained a high surface artifact density. Unit 2 yielded artifacts only from the plow zone and produced no cultural features.

Profiles of unit 2 are provided in Figure 8. This unit was excavated in six 10 cm levels, with the last two levels being a 30 x 30 cm "deep" test taken from the southeast corner. The plow zone and subsoil were identical to those strata in unit 1.

A summary of test unit 2 artifact recovery is presented in Table 4. The total number of artifacts are substantially less than unit 1 (n=517 compared to n=742). Test unit 2 follows unit 1 in yielding kitchen group artifacts in nearly the same frequencies as

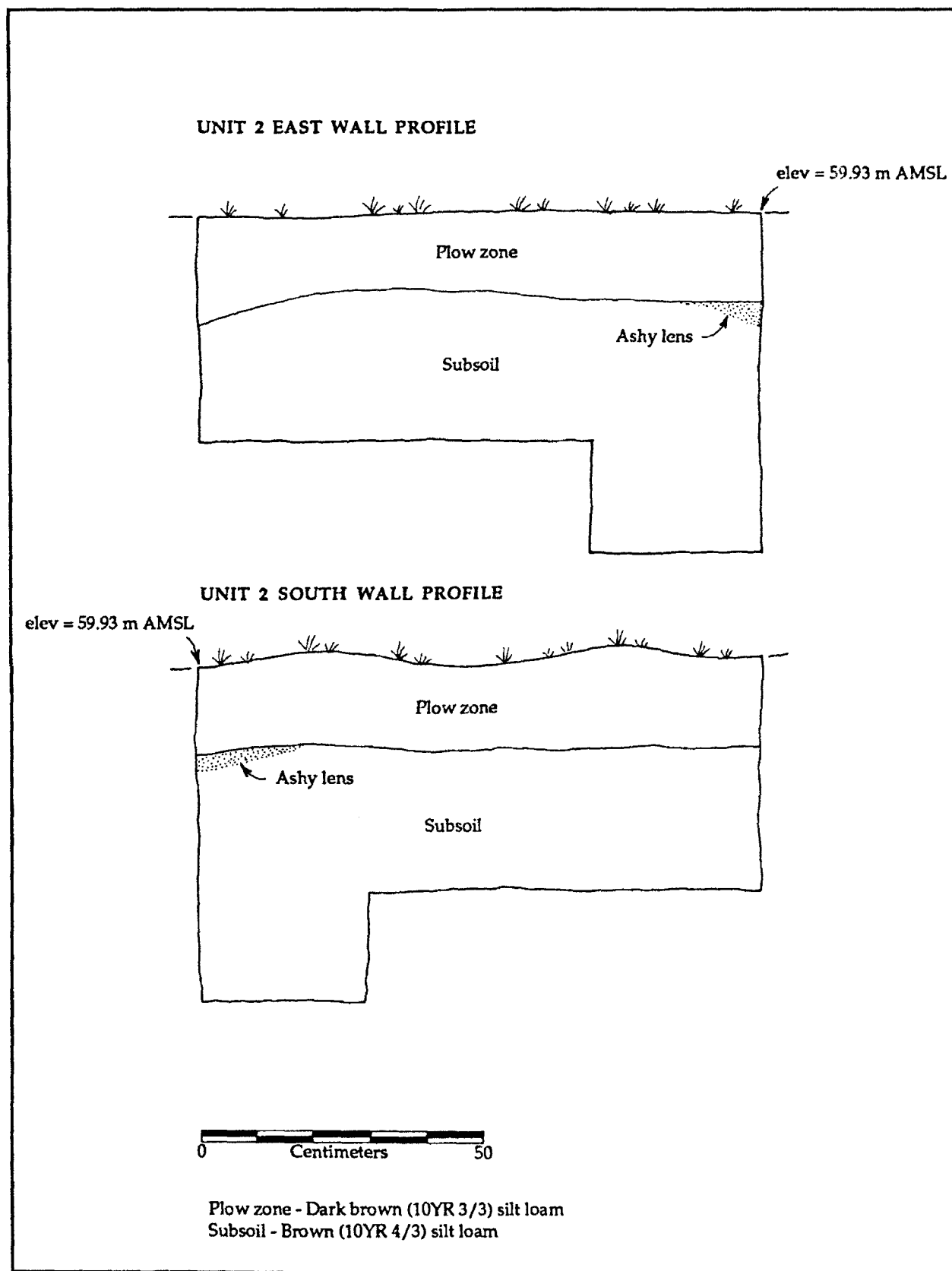


Figure 8. East and South Wall Profiles of Unit 2.

Table 4. Summary of Artifacts Recovered from Test Unit 2.

		<u>L-1</u>	<u>L-2</u>	<u>L-3,4,5,6</u>	<u>TOTAL</u>
KITCHEN GROUP					
	<u>Ceramics</u>				
	Stoneware	2	0	0	2
	Earthenware	3	11	0	14
	Porcelain	1	0	0	1
	<u>Glass</u>				
	Bottle	84	51	0	135
	Table	3	3	0	6
	Canning lid seal	2	1	0	3
	<u>Biological</u>				
	Bone	3	6	0	9
	Charcoal	6	0	0	6
	<u>Other</u>				
	Metal can key	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>
	Subtotal	104	73	0	177
ARCHITECTURE GROUP					
	<u>Stone</u>				
	Brick fragments	99	22	0	121
	<u>Metal</u>				
	Wire nails	5	14	0	19
	Wire nail fragments	12	24	0	36
	Roofing nails	1	3	0	4
	Fencing Staple	0	3	0	3
	<u>Glass</u>				
	Plate glass	<u>41</u>	<u>66</u>	<u>0</u>	<u>107</u>
	Subtotal	158	132	0	290
ACTIVITIES					
	Auto Safety Glass	1	0	0	1
	Hardware (nut/bolt)	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>
	Subtotal	1	1	0	2
CLOTHING					
	Shoe heel fragments	4	0	0	4
	Shoe tack	0	1	0	1
	Metal jean button	0	2	0	2
	Ceramic button	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>
	Subtotal	4	4	0	8
PERSONAL ITEMS GROUP					
	1937 Wheat Penny	0	1	0	1
ARMS GROUP					
	12 Ga. shotgun shell base	0	1	0	1
MISCELLANEOUS/UNIDENTIFIED					
	Coal	1	4	0	5
	Unidentified Metal	14	15	0	29
	Unidentified Plastic	<u>2</u>	<u>2</u>	<u>0</u>	<u>4</u>
	Subtotal	17	21	0	38
TOTAL		284	233	0	517

architectural group artifacts, counter to the trend observed in the controlled surface collection where kitchen group artifacts were the overwhelmingly dominant artifact group. The kitchen group (n=177, or 34.2%) follows the trend set in both the controlled surface collections and the unit 1 analysis, consisting mainly of machine made glass (n=144, or 81.4%). No temporally sensitive amethyst glass was recovered. Ceramics are the second most frequent class of kitchen items (n=17, or 9.6%), with earthenware being the most dominant type. All of the earthenware is plain white ironstone. Stoneware includes two sherds of buff paste, one with the Albany/Bristol slip glaze combination (ca. 1884-1920), and a second sherd with Albany slip interior/exterior glaze. One piece of red painted hard paste porcelain was recovered as well. The ceramics follow familiar patterns already discussed for late nineteenth to early twentieth-century site assemblages.

The architecture group has the highest frequency of any group when brick fragments are included in the totals (n=290, or 56.1%). The brick is all fragmentary, but based on color is likely machine made category I brick. Plate glass is the second most frequent type in the architecture group (n=107, or 36.9%). Wire nails and wire nail fragments constitute the majority of the metal class (n=55, or 88.7%). Similar to test unit 1, the lack of any cut nails or roofing nails with lead heads strongly suggests a post-1900 date for the plow zone deposit.

Unit 2 deviates from the controlled surface collection and unit 1 artifact distributions in that the third most frequent artifact group is clothing (n=8, or 1.5%), instead of the activities group (n=2, or 0.4%). None of the items in this latter group is particularly temporally sensitive, except twentieth-century auto safety glass.

The low frequency groups follow the usual pattern in unit 2. The personal items group consisted of a single 1937 wheat penny, and the arms group had a single 12 ga. shotgun shell base. These groups also indicate a twentieth-century occupation of the site. The percentage of miscellaneous and unidentified items is relatively close to that of unit 1 (n=38, or 7.4%), with unidentified metal again forming the majority of the total for the group.

The unit 2 data provides a similar artifact distribution pattern (by group) as that in the unit 1 sample. This is not surprising as the units are only 5 m apart and are essentially sampling the same 16-17 cm thick plow zone deposit. The unit 2 artifacts also suggest a twentieth-century date for the Lewis site, although less convincingly than the unit 1 results. The primary deviation from the controlled surface collection artifact distribution by groups with that from the test units is that the kitchen group artifacts are found in relatively even proportions to the architecture group items (even omitting architectural stone). Architectural group items are thus either under-represented in the surface collection, or kitchen group items are over-represented.

## INFORMANT INTERVIEW

On February 21, 1992 George Lewis (age 75), the Lewis site landowner and former resident, was interviewed by the author on site (Figure 9). Also present was Matthew Dawson, age 78, who grew up in a structure across Cow Bayou in section 19. The recollections of these two old friends provided an excellent oral history of the Lewis site and of lifeways along Cow Bayou since the 1920s.

The property on which the Lewis site is located has apparently been owned by three members of the Lewis family since the late nineteenth century. Eighty acres were purchased by George Lewis' great-grandfather, Rich Brager, who came to Lee County from Maury County, Tennessee. The date of this purchase is not precisely known, but George's father, who was born in Tennessee in 1884, made the trip when he was about 4 years old. This movement followed a larger black migration which occurred between 1870 and 1880, when large numbers of freedmen seeking economic opportunity moved to eastern Arkansas primarily from Tennessee (Hanson and Moneyhon 1989:57). Therefore, the earliest date for occupation of the property would be ca. 1888. However, George indicated that when his great-grandfather and father initially moved to the area, they stayed for a while at Matt Dawson's "Big House" on Clay Hill, to the north on Crowley's Ridge, and presumably did wage labor. Matt Dawson was a wealthy white landowner and the namesake of Matthew Dawson, the second informant for this interview.

Sometime after 1888, Rich Brager purchased his 80 acres and began clearing and cultivating the land, as well as living in a structure near or at what is now known as the Lewis site. The location of this early structure is unknown. Although it could possibly have been located at the Lewis site, no evidence was found for a nineteenth-century structure during the current project. It is possible that Rich Brager's structure was located on the northern 40 acres, across the gully and closer to Crowley's Ridge, on the high ground where he and his family had initially lived and probably maintained social contacts. Upon Rich Brager's death (date uncertain), the 80 acre parcel was divided, with the southern 40 acres going to George Lewis' father (Robert, the grandson of Rich Brager), and the northern 40 acres, across the gully, going to Brager's son.

A substantial frame structure was erected on the site in 1906, when Robert Lewis married. George Lewis (informant) was born in this residence in 1916. His family lived at this house until he was discharged from the Army in 1950. At this time, his mother's health was bad and the family relocated to the high ground of Clay Hill on Crowley's Ridge, 3 km north, to avoid the unhealthy atmosphere of the Cow Bayou Bottoms. Thus, there is a continuation of the social contact with the Crowley's Ridge area, which was begun initially by Rich Brager. Sometime in the late 1950s, the site was wired for electrical power, which was suggested by the surface presence of two white porcelain ceramic insulators. An aunt and uncle lived in the Lewis



Figure 9. George Lewis (left) and Matthew Dawson (right) at the Lewis Site.



site residence until about 1969, and probably accounted for some of the more recent bottle glass. This aunt and uncle also built a shed on the site in the 1950s, which may be the southernmost structure shown on the site in Figure 3. George Lewis dismantled and salvaged portions of the residence ca. 1973, leaving only the brick chimney. By the time George last farmed the field in 1981, the chimney had collapsed, and some bricks may have been salvaged. He indicated that our test units were on either side of the base of the chimney. Today the acreage, including the site, is rented to another farmer.

George Lewis described the house as a frame, four room structure, with a big brick double chimney in the middle (Figure 10). The large chimney went through the floor to the ground, while a smaller, less substantial chimney was found between the kitchen and dining room areas. This chimney was of brick, and was suspended from the ceiling, subtending only foot or two into the room. The structure faced east, overlooking the old road and Cow Bayou. The house was built in an "L" shape, with two 16 x 16 foot (4.9 x 4.9 m) bedrooms on either side of the big chimney, a front porch 32 x 10 foot (9.8 x 3.0 m), a 12 x 10 foot (3.7 x 3.0 m) dining room extending south off the eastern bedroom, and a 12 x 10 foot (3.7 x 3.0 m) kitchen south of the dining room. Total floor space equaled approximately 752 ft<sup>2</sup>, or 70.2 m<sup>2</sup>. However, if the porch is included, the total living area is increased to 1,072 ft<sup>2</sup>, or 99.6 m<sup>2</sup>. This house originally had a split wood shingle roof, later replaced with tar shingles. Interestingly, the structure was built on wooden blocks, not brick or cement piers as commonly found today. Timber for lumber was cut on the property and hauled by mule wagon to a nearby mill for cutting. The bricks used in the construction of the chimney and glass for the windows were purchased at the Miller Lumber Company in Marianna, and hauled by mule wagon to the site.

The brick chimney was apparently more substantial than the chimneys found in other residences along Cow Bayou. Tenant houses near the Shady Grove Church did not have chimneys extending all the way to the ground, and as a consequence, floated off their blocks during high water, and were sometimes swept away. The Lewis' chimney anchored their house during flood levels, which could exceed the height of the building. During high water the Lewis family would abandon the site and stay at Crowley's Ridge until the water receded. The disparity in housing between farm owners and tenants (renters and share croppers) was first examined by sociologists working among the South's plantation tenants from the 1920s to the 1940s, and more recently by Orser (1987:82-137). Orser suggests that while the status disparity between the groups should be recognizable in the archaeological record, it is often not, due to shifting, or relocation of tenants, and post-depositional factors, such as structure salvage and modern land leveling.

Mr. Lewis described the layout of the farmyard, which is superimposed over the archaeological base map in Figure 10. The position of the residence is based on the approximate location of the chimney base, which Mr. Lewis indicated was between

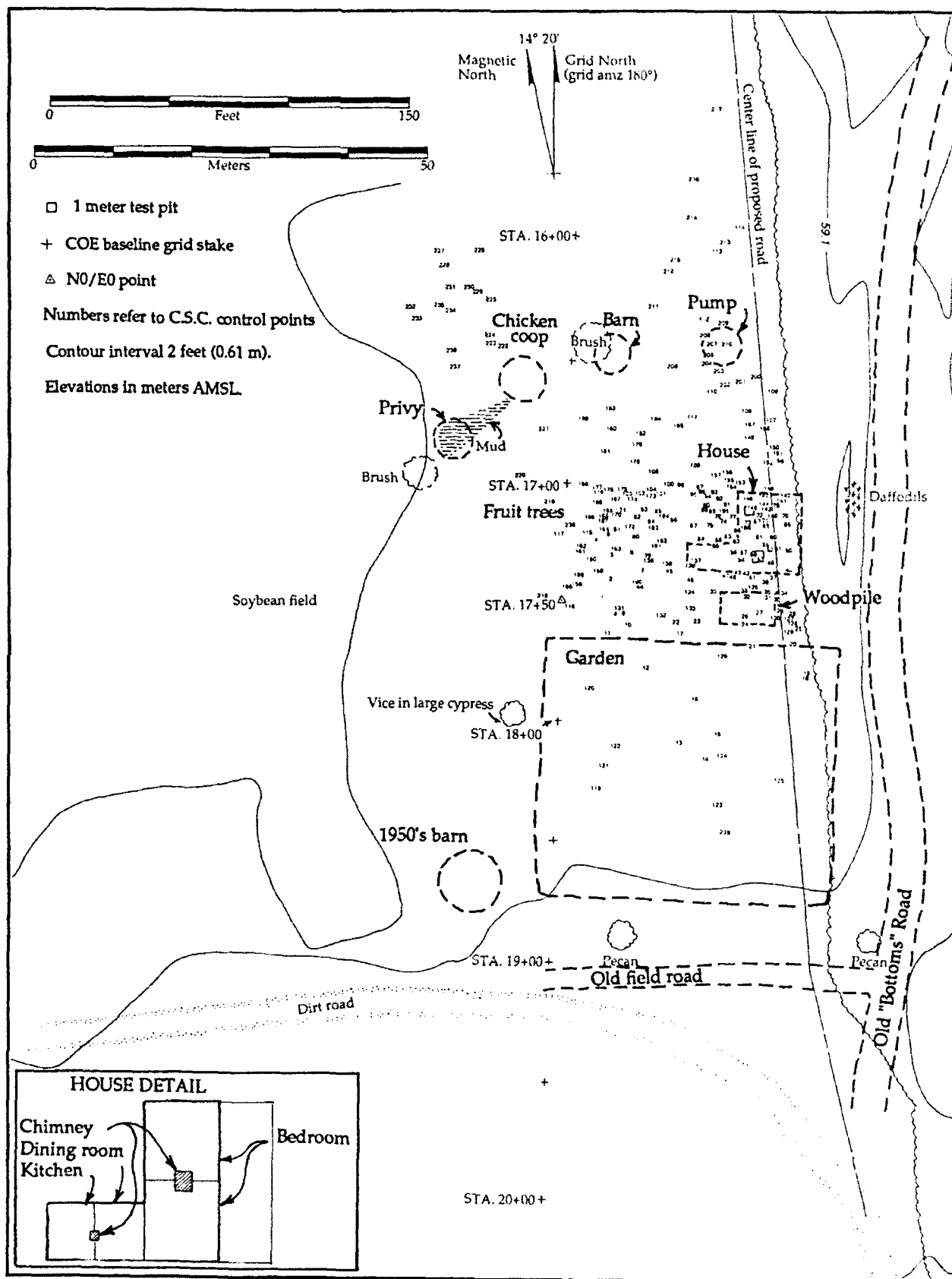


Figure 10. Lewis Farmstead Plan Superimposed over Site Map Showing Surface Collection Artifact Distribution.

the two test pits. The old "Bottoms Road" ran in front of the house, and is now identified by a depression, although the road was level with the field then. The area south of the residence was used mainly as a garden. A woodpile was positioned between the house and the garden. The privy was located west of the kitchen, in a lower, wet area. A barn for both mules and pigs was located northeast of the kitchen. The area north of the barn was used as a small pasture for the mules, which never numbered more than four at any one time. A chicken coop was located between the privy and barn. A number of peach and other fruit trees were grown in the yard behind the house. A row of pecan trees marked the southern property line. A hand water pump was located north of the house; the site never had any other water source. The front yard had a wooden fence running beside the road, where daffodils are seen today.

The remainder of the 40 acres was used to grow cotton and corn. An average of 10 or 12 bales of cotton and between 140 and 200 bushels of corn were produced annually on the farm. Some additional revenue was gained by selling pecans, which were abundant on the site. Cotton was pressed in the bed of a mule wagon and taken to the Marianna Gin. Mr. Lewis bought his first tractor in 1950, but continued to use mules for some plowing until 1955.

The Lewis site area was called "Twin Bridges" by some of the local residents, because of wooden trestle bridges immediately south and north of the site, over Sandy Slough and the unnamed gully slated for scour repair. The road which followed the levee of Cow Bayou and traversed the bridges was called simply the "Bottoms Road." There had been a trail along the edge of the bayou for a long time, but the construction of the wooden trestle bridges sometime before 1916 allowed mule wagons to use the trail. Given the number of Kent phase sites in the area, this was likely an aboriginal trail. Prior to this, mule wagons had to follow an irregular path around drainages cutting the natural levee.

Mr. Lewis described an interesting settlement pattern of black farm owners and black tenants along Cow Bayou in the early to mid twentieth century. Black farm owners were located north of Bridge No. 4 to Crowley's Ridge, while the black tenants were located from Bridge No. 4 southeast to Soudan, along the natural levee of Cow Bayou (see Figure 3). Bridge No. 4 is located near what was once a prominent bend in Cow Bayou (compare the Park Place map [Figure 3] with the GLO plat maps [Figure 2]).

Robert Lewis and his uncle (Mr. Walker) owned halves of the original Rich Brager 80 acre parcel. On their combined property, several structures were found, including the Lewis site residence, the uncle's residence across the ditch, and another residence 200 m west of the Lewis site for a relative (Ernest Hampton). Over 100 acres to the north was owned by Spencer Henderson, another black landowner. The nearest neighbor to the south was Mr. Price, a black landowner who lived in a structure approximately 250 m away, across Sandy Slough, on a 40 acre lot. The site

of his residence is now marked by two large oaks and an orange COE witness pole (BM-N-13-5-91) on the project baseline, 165.49 m grid south of the N0 E0 station. George Brown, another black landowner, and his family lived on a 40 acre lot south of Mr. Price. From Mr. Brown's southeast toward Soudan was a white landowner, Mart Hill, whose property was farmed by numerous tenants. Figure 3 shows more than 20 structures along the levee of Cow Bayou southeast of Bridge No. 4. Many of these are tenant residences. Today, only one of these tenant structures is standing and another is marked by a free standing chimney.

Mart Hill's tenants farmed irregular-sized lots, assigned to them by the owner, with some as small as 7 or 8 acres. George Lewis specifically called these tenants "halvers," a reference to a sharecropping arrangement, where Mr. Hill took one half of all the tenants' crops in exchange for the use of land and equipment. The halvers bought supplies on credit from Hill's store, which was located in the SE 1/4 of section 32 in a complex of five mapped structures which also included the Mart Hill residence (see Figure 3). If the Hill store ledger could be located, one would expect to find tenant purchase patterns similar to those found in the Long store ledger at the Wavery Plantation in Mississippi (Adams and Smith 1985). It would be interesting to examine the Hill store ledger for any Lewis family purchases or credits. However, in contrast to the halvers, George said his family went to the store in Marianna, usually by mule wagon.

In general, George said that the black landowners of Cow Bayou had material living conditions very similar to those of Mart Hill's tenants. However, he stated that his chimney was superior to many of the halvers' chimneys on Mart Hill's land. Study of the 1930 Census of Agriculture has demonstrated 47 percent higher land and building values for black landowners over black sharecroppers in South Carolina (cf. Orser 1988:Table 13). Another possible indication of status difference along Cow Bayou is the 1963 Park Place map, which shows the "Bottoms Road" in front of the black landowners' houses as improved, while the same road, around a bend in Cow Bayou, was unimproved for several miles dotted with "halvers" tenant structures. While this could be related to greater political clout of the black landowners versus the tenants, it could also be influenced by other factors such as Mart Hill's lack of concern, or construction of the St. Francis Floodway.

The Shady Grove Baptist Church was located approximately 900 m north of the Mart Hill compound on the old "Bottoms" road, roughly in the center of all the structures stretched along Cow Bayou (see Figure 3). "Boss Man" Mart Hill paid a teacher to operate a school for his tenants' children in this church. George added that the school was only open about three or four months of the year, because Mr. Hill would only pay the teacher during slow agricultural periods. The children were expected to provide additional labor during cotton season. George attended the Shady Grove Church school, which involved a 3 mile walk down the "Bottoms" road. During cotton season, when the school was closed, he could have attended a school in Marianna, but did not because it was located about 8 miles away. Matt

Dawson, the second informant, said he went to another school, operated by a Mr. Dawson, the previously mentioned white landowner of Clay Hill.

Mr. Lewis said his father was buried in "the new cemetery on the Old Thomas Place." This cemetery can be found on the Lee County Road map, and lies about 2 miles northwest of the site, toward the town of Haynes. Rich Brager is apparently buried in the "old black cemetery at Clay Hill," but he has no tombstone. No one was interred on the Lewis site or at the Shady Grove Church.

The Cow Bayou area began to be depopulated in the 1950s, as a result of government efforts to end the sharecropping system. The demise of cotton-based agriculture had begun even earlier in 1933, when the government placed the first allotments on cotton. Today, the black landowners' and tenants' structures are all gone, except one, and the only residents of Cow Bayou are found beside U.S. 79. The Shady Grove Church and Mart Hill residence are also now archaeological sites. For comparative purposes it would be interesting to similarly investigate a sample of these Cow Bayou tenant sites, as well as the Mart Hill residence, to refine artifact pattern analysis as a predictor of ethnicity and economic status.

## DISCUSSION

### Ethnoarchaeology

When the archaeological data presented in the first section are compared with the ethnographic data provided by George Lewis, clearer site interpretations can be offered. Figure 10 displays the distribution of collection points and 1 x 1 m units, overlain with the locations of structures and activity areas as recalled by George Lewis.

The test units were excavated in locations that would have been under the residence, which was suggested by the significantly greater counts of architectural items, especially nails, and their placement within the surface concentration of brick and glass. Test unit 1 was probably under the northern bedroom, and test unit 2 was probably under the southern bedroom. It was further suggested that the artifact profiles from both units support a post-1900 date for the structure. This was confirmed by George Lewis, who stated that the residence was built ca. 1906. The 1 x 1 m units also demonstrate that the site has not been deeply plowed, as the plow zone is a relatively shallow 16-17 cm.

Feature 1, which consisted of two zones, was a depression which accumulated debris during the later occupation of the residence. Since it was not completely exposed or excavated, interpretations are limited to that portion of feature 1 in unit 1. It is possible that the depression is a portion of a cellar; however, given its rounded form

and edges, it is interpreted as a "wallow." George Lewis provided no information about what was under the house. A dateable intact jar was recovered from 35 cm below surface, indicating the depth of the depression in the early 1950s. The occupational refuse was found mainly in the "contact zone" of the feature, along the bottom and sides of the depression. The upper, lighter, ashy zone, which was relatively artifact-free, contained varves suggestive of episodic deposition. These varves were likely formed after the structure was dismantled ca. 1973 and soil mixed with ash from the nearby free standing chimney began to fill the upper portion of the depression. In one place, the lighter zone also appeared to follow an abandoned rodent burrow through the contact zone. Because the house was built up on wooden blocks, one would not expect to find structural features, such as footings or builder's trenches, although other "midden" filled depressions similar to feature 1 could be predicted in further excavations. Dogs might have preferred resting under the northern bedroom because the woodpile, dining room, and chimney made space under the southern bedroom less accessible. Evidently the "wallow" was also an expedient location for discarding empty kitchen containers, including spice jars and pharmaceutical bottle glass, in addition to architectural items, mainly wire nails. The two lead fishing sinkers recovered from feature 1 are the only two found at the site.

The remainder of the primary surface concentration is found to the rear of the structure. The majority of the backyard scatter is found within about 10 m west and north of the kitchen/dining room. The density of the scatter diminishes greatly more than 10 m from the structure's former location. Thus, despite repeated plowing of the site, the horizontal distribution of the surface scatter still reflects the presence and approximate location of a structure. However, if one were operating without ethnographic information or structural features, the location of a structure within a high density scatter could only be approximated. This approximation would be less accurate using an area sampling collection method, such as that done at the Greasy Corner (Buchner and Childress 1991) and Country Club Gardens sites (Childress 1990), instead of point proveniences. One assumption would be that the residence faced the road or bayou along which it was aligned. Comparison of the Lewis "backyard" to the "front yard" is not possible, due to lack of surface visibility and no recovery from the former front yard. Evidently the front yard has never been plowed, as naturalized daffodils are found at the edge of the old road.

A secondary concentration, observed in the field on a small rise, was plotted about 45 m northwest of the former structure, on the opposite side of a muddy area (see Figure 10). A total of 24 artifacts was recovered from this area in 16 point proveniences. This concentration was predicted to be the location of an activity area or outbuilding. George Lewis indicated that outbuildings were found between this rise and the residence. The artifact counts for this concentration are: Kitchen Group n=15, or 62.5%; Activities Group n=5, or 20.8%; Architecture Group n=2, or 8.3%; Clothing Group n=1, or 4.2%; and Unidentified (ferrous object) n=1, or 4.2%. The activities group here constitutes a significantly greater proportion than in the total

site percentage (20.8% to 6.8%). The presence of a hanging scale part and plow point indicates that this area may have been used for wagon loading and plow hitching or repair. Since George Lewis indicated that the old mule and hog barn was located about 20 m east of this concentration, this seems plausible. A white porcelain ceramic electrical insulator was also found in this concentration, suggesting that a power pole may also have stood here. George Lewis said that when the area was wired in the 1950s, the lines came from the north at Clay Hill. Low counts of architectural items in this concentration tends to support the suggestion that this was an activity area, and not the location of an outbuilding.

A third surface cluster of artifacts was recorded approximately 15 m north of the residence (see Figure 10). This corresponds almost exactly to the reported location of the hand water pump. While the artifacts recovered here do not include pump hardware (probably salvaged), the majority are kitchen containers (12/14). One would expect some breakage of glass and ceramic containers around the pump. The small area (11 m<sup>2</sup>) of this cluster would also appear to agree with the informant information. Without the ethnographic information we would have an unexplainable cluster of artifacts.

South of the residence, the surface scatter has been previously noted to have the appearance of a random distribution of diminished density. This area is reportedly the location of the old garden. The garden was bounded by pecans and a large cypress, as well as the old road and the structure. The area of the garden is estimated at 1,168 m<sup>2</sup> (12,600 ft<sup>2</sup>). Little can be said about the old garden, other than it exhibits a unique density and distribution pattern from other areas identified on the site by the controlled surface collection. Whether this knowledge will have general utility in predicting old garden locations at other twentieth-century rural sites remains to be tested. An activity area west of the garden is evidenced by an old vise imbedded in the trunk of an old cypress.

North of the reported pump, a low density surface scatter extends along the line of the proposed road. This area was reportedly a pasture for the mules. The presence of some large brick fragments and glass here may be the result of plow drag. Furrows along this eastern edge of the field run in a north-south direction, not east-west as across the majority of the field; thus, some materials from the primary concentration could have been dragged north. Another possible source for this material is the old "Bottoms Road," which parallels this portion of the scatter. Long, linear scatters of historic material frequently parallel old roads and rarely extend more than 30 m away from the road. The pattern exhibited at the Lewis site is likely influenced by both of these factors.

The locations of the privy, barn, and chicken coop were plotted, but artifacts were not recovered from these locations. Brushy areas containing young pecan trees are located very near the reported locations of the outhouse and mule barn, perhaps masking their archaeological visibility. Casual examination of the brushy area did

not reveal any possible structural remains. Without the information provided by George Lewis, we would have no indication where the barn, privy, and chicken coop were situated. These outbuildings are located at the lower density margin of the primary surface concentration, toward the rear of the residence, between the primary and secondary concentrations. This observation may hold true for other sites as well. We hypothesized that outbuildings would be associated with the secondary concentration, but exact spatial relationships could not be determined. In interpreting similar sites without ethnographic data, one can merely generalize that outbuildings are of low archaeological visibility, at the margins of the primary scatter.

### Artifact Patterns

The Lewis site assemblage can be compared to other late nineteenth- and early twentieth-century sites recently investigated by Garl... & Associates, Inc., in Crittenden and St. Francis counties by use of artifact pattern analysis (Buchner and Weaver 1990; Childress 1990; Weaver 1991; Buchner and Childress 1991). Preliminary comparisons have shown that kitchen group artifacts make up the bulk of the material recovered from these sites, ranging between about 80 and 100 percent (Buchner and Childress 1991:Table 6). Excluding brick counts, architectural artifacts have surprisingly low frequencies (less than 10 percent). Weaver (1991:35) noted that this lack of nails, window glass, and other architectural hardware is noticeably different from historical house sites occupied by middle class farm families over the same time period.

It was suggested by both Childress (1990:34-35) and Weaver (1991:35) that the artifact profiles of these sites would be consistent with short-term occupation of tenant or subsistence farmers. The lack of architectural artifacts at these sites suggests that structures, usually constructed of frame lumber, were dismantled and moved or salvaged by the occupants. Informant interviews have recently provided essential ethnographic and interpretive data concerning structure salvage and the Greasy Corner assemblage. At Greasy Corner (3SF332) it is known that the structure was moved some 2,000 feet to a blacktop road. Thus, the characteristics of the Greasy Corner assemblage provide an example of the archaeological attributes of a black tenant period site from which the structure has been salvaged/moved. The movement of such structures is indicative of new social patterns of farm consolidation and labor relations in an era of mechanized and chemical agricultural production.

Table 5 below compares the artifact distribution by functional group between the Lewis site, the Greasy Corner site, and one of the County Club Gardens sites. The Lewis site artifact patterns are presented separately for the 100 percent controlled surface collection, and test units 1 and 2, to highlight the distinctions between the surface assemblage and the subsurface assemblage. The Lewis site assemblage



represents a typical black owned farm. The Greasy Corner site 50% general surface collection artifact pattern is provided, as it shows the characteristics of a known black tenant site assemblage. The County Club Gardens site artifact pattern is presented because the sample size is large, and because the ethnicity and status of the occupants is unknown. Table 5 has been "adjusted" by dropping architectural stone and miscellaneous/unidentified artifact counts and then recalculating percentages with the new total. In reading the table, the first number is the raw count and the second number (found in parenthesis) is the percentage within that sample.

**Table 5. Artifact Samples in Adjusted Functional Categories.**

	<u>CSC</u>	Lewis Site black owner <u>TU1</u>	<u>TU2</u>	GreasyCorner <sup>1</sup> black tenant <u>3SF332</u>	C.C. Gardens <sup>2</sup> unknown status <u>3CT267</u>
KITCHEN	371 (85.1)	319 (51.9)	177 (49.4)	176 (81.1)	609 (99.3)
Glass	236 (54.1)	274 (44.6)	144 (40.2)	151 (69.6)	559 (91.2)
Ceramics	133 (30.5)	17 (2.8)	17 (4.7)	22 (10.1)	50 (8.1)
Biological	2 (0.5)	27 (4.4)	15 (4.2)	0 (0.0)	0 (0.0)
Metal	0 (0.0)	1 (0.1)	1 (0.3)	3 (1.4)	0 (0.0)
ARCHITECTURE	21 (4.8)	268 (43.6)	169 (47.2)	14 (6.4)	0 (0.0)
ACTIVITIES	32 (7.3)	20 (3.3)	2 (0.6)	19 (8.8)	0 (0.0)
CLOTHING	10 (2.3)	4 (0.6)	8 (2.2)	1 (0.5)	3 (0.5)
PERSONAL	1 (0.2)	3 (0.5)	1 (0.3)	4 (1.8)	0 (0.0)
ARMS	1 (0.2)	1 (0.2)	1 (0.3)	3 (1.4)	1 (0.2)
TOTALS	436	615	358	217	613

Note: Architecture Stone Counts and Miscellaneous/Unidentified Group Not Included in Table.

<sup>1</sup> Buchner and Childress (1991)

<sup>2</sup> Childress (1990)

Looking first at the Lewis site, one can see the previously discussed disparity between the test unit samples and the surface collection sample. The test units contain far greater numbers of architectural materials, as well as greater percentages, a pattern more in line with middle class deposits. Conversely, the Kitchen Group percentages are lower for the test units, which is partially related to the "closure problem" in working with percents (see McNutt 1973). Within the Kitchen Group of the test units, the ceramic class suffers the greatest reduction, while the glass class is moderately reduced compared to the surface collection. The biological and metal

classes show an increase. The Activities Group shows a decrease from the surface collection, while all the minority groups are closely comparable.

Orser (1988:236) suggests that "more rigor" can be brought to the analysis of the similarities and differences between the artifact samples by the construction of a matrix of similarity using the Robinson (1951) Index of Agreement. The Index of Agreement (*IA*) was originally intended to aid in chronologically ordering (seriating) surface collections (see Brainard 1951), but Orser uses the *IA* as an unbiased measure of similarity.

To compute the *IA*, one begins with an original data matrix (see Table 5), and the largest percentage of artifacts in one class is subtracted from that of the same class in a second sample, or site. This procedure is computed for all artifact classes, yielding absolute values. The resulting differences are added and 200 is subtracted from the sum, because the maximum difference between two samples is 200 percent. The absolute value of the figure that results is the *IA*.

The *IA* was computed for all possible combinations of samples ( $n=10$ ) between the Lewis site, the Greasy Corner site, and the Country Club Gardens site. The *IA* is large when the artifact samples are similar, and small when the samples are dissimilar. In the similarity matrix, the principal diagonal contains the value of 200, because the sum of the differences of percents for one row with itself equals zero (Marquardt 1978:264).

Table 6 below presents an ordered, or seriated, similarity matrix using *IA* values for each of the 10 combinations. Seriation is a descriptive analytic technique, the purpose of which is to arrange comparable samples along a line or single dimension such that the position of each sample reflects its similarity to the others. While Orser (1988:237) does not seriate his matrices, the sorting technique I of Gelfand (1971) was chosen here, because it is efficient in sorting small numbers of samples. Order implies steady decrease in *IA* as one moves away from the principal diagonal. The order of samples is read from left to right across the top of Table 6. The Lewis site samples seriate, or order, perfectly.

Although seriation is frequently used for chronological ordering (dating), it is also possible to use seriation to order samples in other dimensions such as social status or function. Knowing that the Lewis site was a black owned farm, one might expect it to seriate before the lower status black tenant site, Greasy Corner, which it does. The unknown status site, County Club Gardens, seriates first, perhaps indicating that it is of higher status than the known sites. This is probably not true, however, and its placement likely reflects functional difference, not a status difference. The placement of the test units at the end of the seriation order probably also indicates functional differences; one would expect the test units to be anomalies anyway. For seriation to be of much value, reliable status and function indicators must be discriminated and selected.

**Table 6. Seriated Similarity Matrix for Artifact Samples Grouped in Functional Categories.**

	C.C. Gardens 25% CSC	Lewis site 100% CSC	Greasy Corner 50% GSC	Lewis site TU1	Lewis site TU2
C.C. Gardens 25% CSC	200.0				
Lewis Site 100% CSC	171.7	200.0			
Greasy Corner 50% GSC	163.6	188.3	200.0		
Lewis site TU 1	105.1	122.0	125.5	200.0	
Lewis site TU 2	100.2	114.9	115.0	189.3	200.0

CSC=Controlled Surface Collection; GSC=General Surface Collection

A further understanding of these indices can be gained by simply ranking the samples by *IA* score. Table 7 presents the sample pairs ranked in such a manner. The pair exhibiting the most similarity is the test pits, which is not surprising, since they are sampling the same deposit. The second most similar is the Lewis site CSC-Greasy Corner CSC pair. Because the status and ethnicity of both of these are known, this would indicate that black owner and tenant sites have similar artifact distributions in this sample by functional group. An *IA* score computed at the class level would lead to lower *IA* scores, and might be considered as a future measure of association.

**Table 7. Artifact Samples Grouped in Functional Categories and Ranked by Index of Agreement.**

<u>Samples Compared</u>	<u>Index of Agreement</u>
Lewis site TU1 to TU2	189.3
Lewis site CSC to Greasy Corner GSC	188.3
Lewis site CSC to C.C. Gardens CSC	171.7
Greasy Corner GSC to C.C. Gardens CSC	163.6
Lewis site TU1 to Greasy Corner GSC	125.5
Lewis site CSC to TU1	122.0
Lewis site TU 2 to Greasy Corner GSC	115.0
Lewis site CSC to TU 2	114.9
Lewis site TU 1 to C.C. Gardens CSC	105.1
Lewis site TU 2 to C.C. Gardens CSC	100.2

Somewhat less closely associated is the Lewis site CSC-C.C. Gardens CSC pair, which would indicate that, despite their similarity, there could be status or functional differences between the two. The same is true for the next pair, Greasy Corner-C.C.

Gardens. The remaining six pairs involve combinations with the Lewis site test units, which are functionally different, and show low *IA* values. Test unit 1 appears to be slightly more similar than test unit 2 to the Lewis site surface collection.

While these indices provide some measure of control, the exact nature of the similarity and differences between the samples is difficult to determine. Since the class level distinction previously mentioned is probably most responsible for the variability between the three sites' surface collections, the analysis can be shifted to the Kitchen Class. At Millwood Plantation, the Foodways Group showed extensive class variability and was sensitive enough to distinguish between slave, tenant, overseer, and owner artifact patterns (Orser 1988:239). Others have noted that ceramics alone appear to be a sensitive indicator of relative socioeconomic status, as well as plantation size (Moore 1975:150). Garrow (1989) used a bottle glass/ceramic comparison to assess an artifact sample taken from the Oxon Hill well. His operative statistic was also the Robinson Index of Agreement.

Table 8 provides a frequency comparison of the two most variable and well represented classes within the Kitchen Group. The information is derived from Table 5, and the percents are recalculated to reflect the new N. Note that the sites are correctly ordered, or seriated. The Lewis site appears to have distinguished itself from the tenant site and the unknown status site through a different proportion of glass to ceramics. When the *IA* is calculated, the Greasy Corner and C.C. Gardens sites appear most similar (*IA*=191). The Lewis site is not really similar to Greasy Corner (*IA*=153.4) or C.C. Gardens (*IA*=144.4).

Table 8. Frequency Comparison of Kitchen Glass and Kitchen Ceramics.

<u>Site</u>	<u>Class</u>	<u>Kitchen Glass</u>		<u>Kitchen Ceramics</u>	
		<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>
Lewis site 100% CSC					
Black Owner		236	64.0	133	36.0
Greasy Corner 50% GSC					
Black Tenant		151	87.3	22	12.7
C.C. Gardens 25% CSC					
Unknown status		559	91.8	50	8.2

Frequency comparison of the three major ceramic types is presented in Table 9 below. Test unit data from the Lewis site has been dropped from analysis in this table. This distribution is ordered, with the Lewis site occurring between the C.C. Gardens site and the Greasy Corner site. A problem with this type of comparison is the small number of sherds from both the C.C. Gardens site and the Greasy Corner site. Large sample size must be used to maintain validity. This table does not

distinguish between the varieties of earthenware. Of particular interest is the high incidence of cream colored ware in the County Club Gardens sample (28/38), and its absence in the other samples.

**Table 9. Frequency Comparison of Ceramic Types.**

Site	Type	Earthenware		Stoneware		Porcelain	
		#	%	#	%	#	%
Greasy Corner 50% GSC	Black Tenant	14	63.6	3	13.6	5	22.7
Lewis site 100% CSC	Black Owner	95	71.4	29	21.8	9	6.8
C.C. Gardens 25% CSC	Unknown status	38	76.0	12	24.0	0	0.0

When *IA* values are calculated based on the frequency of ceramic types, the following results are obtained. Surprisingly, the Lewis site-C.C. Gardens combination shows the most similarity (*IA*=186.4). The second highest value is obtained from the Lewis site-Greasy Corner combination (*IA*=168.1). The lowest value is obtained from the C.C. Gardens-Greasy Corner combination (*IA*=154.5). At a variety level analysis, the Lewis site would probably show more similarity to the Greasy Corner sample, and less to the C.C. Gardens sample.

The relationship of decorated to undecorated earthenware sherds was also tabulated. The Lewis site was observed in the field to have a seemingly greater, or richer, variety of ceramics. Based on this observation and prior to the informant interview data, it was hypothesized that the Lewis site might represent an "overseer" residence. The number of decorated to undecorated earthenwares at the Lewis site is 31/95, or 32%. At the C.C. Gardens site, there are fewer decorated earthenwares, and the relationship is 8/50, or 16%. The small size of the Greasy Corner sample yields a 5/9, or 55% ratio. While this may appear to be a good crude indicator of the "richness" or socio-status of a site, there are other factors to consider in the formation of the assemblage, such as social patterns of shifting, house location, structure salvage, and post-depositional processes.

A summary comparison of the ranks of sample pairs by indices of agreement is provided in Table 10. Interpretation is not straightforward. At the group level, black owned and black tenant sites appear to be very similar. Within the Kitchen class this similarity between owners and tenants begins to break down. This is the area where other scholars have noticed distinctions. It is interesting that the unknown status and black tenant site combination is least similar at the group level and ceramic type level, but most similar at the class level. The high degree of similarity between the Lewis site and C.C. Gardens site at the ceramic type level of analysis would break down at the sub-type level of analysis.

TABLE 10. Ranks by Indices of Agreement.

<u>Sample Combination</u>	<u>Category</u> <u>Functional Group</u>		<u>Kitchen Class,</u> <u>Glass and Ceramics</u>		<u>Ceramic Type</u>	
	<u>rank</u>	<u>IA</u>	<u>rank</u>	<u>IA</u>	<u>rank</u>	<u>IA</u>
Lewis site-Greasy Corner (black owner-black tenant)	1	188.3	2	153.4	2	168.1
Lewis site-C.C. Gardens (black owner-unknown status)	2	171.7	3	144.4	1	186.4
C.C. Gardens-Greasy Corner (unknown status-black tenant)	3	163.6	1	191.0	3	154.5

What is clear from these tests is that the correlation of artifact samples with status and ethnicity is difficult to determine in eastern Arkansas, as it has proven to be on postbellum plantations in Georgia (Moore 1985) and South Carolina (Orser 1988). Interpretations are not straightforward, but with a larger ethnoarchaeological site data base, the Robinson Index of Agreement can continue to be refined as an unbiased measure of association, and seriation of similarity matrices can be used to examine the effects of variables such as status, ethnicity, and differential site function on site assemblage content.

## VI. SUMMARY AND RECOMMENDATIONS

Cultural resources investigations, including a literature and records search, subsurface testing, artifact analysis, and informant interviews, were conducted for the Lewis site on former Cow Bayou, in Lee County, Arkansas. This work was conducted for the U.S. Army Corps of Engineers, Memphis District, prior to proposed scour repair above Bridge No. 4, Marianna to Madison channel, St. Francis Floodway. The results of the study have been presented in the preceding chapter. Interpretations of the site based on the assemblage content have been offered, as well as comparisons to informant information. The site was determined to be a single component, twentieth-century, small black owned farmstead.

The literature and records search indicated that no previously recorded sites were found in the project area, and only one archaeological site has been previously recorded within 3 km of the project area. The Troublesome Lake site (3LE128) contains two prehistoric components (Baytown and Mississippian) and is located across the St. Francis Floodway, well east of the project area.

Inspection of GLO Plat maps, USGS topographic maps (1963 and 1984) and aerial photographs provides additional data about the Lewis Site, as well as the distribution of contemporaneous tenant settlements along Cow Bayou. Cow Bayou was one of the first areas of Lee County to be settled, and by 1910, the Cow Bayou natural levee was densely populated with black landowners and tenants participating in the cotton economy.

Archaeological investigations at the Lewis site consisted of the excavation of two 1 x 1 m test units and a 100 percent controlled surface collection. The subsurface testing at the site revealed artifact concentrations similar in content to the surface collection, but different in the proportion of architectural to kitchen group artifacts. These deposits were found in a shallow 16-17 cm thick plow zone deposit. A single feature was recorded extending below the plow zone into sterile subsoil, and is interpreted as a refuse filled depression (wallow?), that was formerly located under the structure. The feature was dated to post-1947 by the presence of an intact "McCORMICK & Co." screw top spice jar.

Analysis of the recovered material indicates that the Lewis site was initially occupied in the early twentieth century. Informants date the structure to 1906, supporting the archaeological data. No firm indication of a late nineteenth-century occupation was found at the site, although informants suggested that a structure might have been found on the tract during land clearing in the 1890s. The Lewis

residence was then apparently continuously occupied from 1906 until 1969. The structure was salvaged for architectural materials by the owner ca. 1973, leaving only the double chimney, which is now also gone.

The historic assemblage was compared to two similar assemblages from Crittenden and St. Francis counties by use of the Robinson Index of Agreement. The artifact pattern of these sites is one dominated by kitchen group artifacts, with variability occurring within the kitchen group at the class and type level. The relationship of kitchen glass to ceramics may be of use in differentiating between status groups. Similarity matrices were seriated in an attempt to find recognizable and replicable archaeological patterns of status and ethnicity.

The surface distribution of the Lewis site was also compared to the information provided by the informant, the ex-resident and owner of the site, George Lewis. The exact dating and chronology of the site is invaluable information. The spatial relationships of the surface distribution were compared to the reported locations of outbuildings and activity areas. Some correlation was evident, but without the ethnographic data, some of the scatter clusters would not have been fully understood. The ethnographic information provides a much richer interpretive framework for future reference.

The occupation of the Lewis site correlates with the height of farm tenancy in eastern Arkansas. The site was part of a linear settlement pattern following the levee of Cow Bayou. Wagons on the old road following the bayou would have linked the site with the other tenant period structures downstream on the south bank of Cow Bayou, as well as the communities of Clay Hill and Marianna. Another aspect of the settlement pattern is the spatial separation of the black landowners from the black tenants, southeast of the big bend in Cow Bayou. The white landowners and his tenants were closer to the railroad. Black owned residences may have been better built than tenant residences; the Lewis family definitely had a superior chimney. Social separations between the Lewis family and other black tenants included buying goods at different stores. However, there was evidently a high degree of contact, as black landowners' children apparently went to the same school as the tenant children.

Due to the high level of effort devoted to the site, a recommendation of no further work is offered. Significance of late historic farmstead sites has been recently discussed (Wilson 1990), and the Lewis site does not appear to meet the qualifications outlined. According to Wilson's criteria (1990:30), the Lewis site would be neither "good" nor "bad," but would be an "ugly" site (i.e., one which could benefit from more work, but for which further work is not clearly necessary); hence, its future study is more subject to political forces than those sites whose National Register eligibility is clear. "Ugly" sites are very frequent, and the National Register eligibility of such sites is problematic. Important factors in the recommendation of no further work include the late date of the wallow feature (less



than 45 years old), complete recovery from the site surface, and the oral testimony of George Lewis. There is little archaeological research potential remaining for the site. Therefore, the site is not considered eligible for inclusion on the National Register of Historic Places.

Garrow & Associates, Inc. is of the opinion that the site study has made a significant contribution to the understanding of the artifact patterns of early twentieth-century small black owned farms in eastern Arkansas, and provides both data and methodology for future comparative research. Other researchers of the early twentieth-century life along Cow Bayou should consider using the following additional sources: 1) other maps, perhaps old county road maps from the 1920s or 1930s; 2) photographs of the area, including 1930s aerial photos from the Soil Conservation Service (the negatives are housed in Vicksburg), and from construction or survey photographs of the St. Francis Floodway showing the Lewis residence from the St. Francis Levee District; 3) further informant interviews, including follow up interviews with George Lewis and Matt Dawson; and 4) the Mart Hill store ledger, so that research similar to that undertaken for the Waverly Plantation could be conducted.

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## APPENDICES

**APPENDIX 1: CONTROLLED SURFACE COLLECTION  
ARTIFACT DATA**

# APPENDIX I. Controlled Surface Collection Artifact Data.

Point and Bag #	Azimuth from 0.0	Distance (meters)	Arbit. <sup>1</sup> Elev.	Group & Class	Artifact Description
1	263°07'	5.0	98.40	KC	Plain white ironstone
				ZM	Rusted tractor fuel port
2	245°08'	7.0	98.43	KG	Milk glass canning seal lid frag.
				KG	Clear m.m. bottle glass
				KG	Amber m.m. bottle glass
3	226°43'	8.5	98.41	CB	Rubber shoe heel
				KG	Table glass, clear tumbler rim
				KG	Clear m.m. bottle glass
				KC	Hard paste porcelain, plain white, foot ring
				KC	Hard paste porcelain, plain white
4	208°03'	9.4	98.32	MG	Flat solarized clear glass
				KG	Amber m.m. bottle glass, square base
				KG	3 pcs. clear m.m. bottle glass
				KC	2 pcs. plain white ironstone
5	213°46'	10.3	98.37	KG	Minty green molded m.m. table glass
				KC	Plain white ironstone rim
				KC	Green/blue overglaze ironstone
				KG	3 pcs. clear m.m. bottle glass
6	234°09'	10.7	98.43	ZG	Swirled glass marble 0.625" dia.
				ZG	Clear molded lamp glass
				KC	molded white ironstone rim
7	247°48'	10.9	98.47	AG	Plate glass 0.09" thick
				KG	3 pcs. clear m.m. bottle glass
				KC	2 pcs. plain white ironstone
8	282°29'	7.2	98.42	AG	2 pcs. plate glass 0.10" thick
9	281°42'	8.5	98.39	ZB	Rubber inner tube with circular patch cutout
10	289°38'	9.0	98.40	KG	Amethyst bottle glass, square base frag.
11	305°29'	7.2	98.34	KG	Clear m.m. bottle glass
12	306°19'	13.8	98.37	KG	Milk glass table glass, floral molded
13	319°11'	23.6	98.36	KG	Rectangular base, clear m.m. bottle glass
14	316°48'	27.3	98.28	ZC	Porcelain electrical insulator "Sears USA"
15	309°57'	26.1	98.32	KG	Clear threaded m.m. bottle neck
16	305°25'	21.0	98.38	KC	Ivory colored earthenware, blue/white slip one side, unglazed opposite side
17	284°13'	15.5	98.41	KC	Hard paste porcelain, white
18	286°41'	32.6	98.47	KC	Buff stoneware, Albany int./Bristol ext.

<sup>1</sup>Arbitrary elevations, 100.00 m=60.43 m AMSL

# APPENDIX I Continued. Controlled Surface Collection Artifact Data.

<u>Point and Bag #</u>	<u>Azimuth from 0.0</u>	<u>Distance (meters)</u>	<u>Arbit. Elev.</u>	<u>Group &amp; Class</u>	<u>Artifact Description</u>
19	285°27'	32.3	98.48	KC	Plain white ironstone
				AS	Large brick fragment, category I
20	279°46'	29.9	98.50	ZM	Farm implement hardware
21	282°31'	24.8	98.40	KC	Plain white ironstone
22	279°33'	14.7	98.37	KG	3 pieces clear m.m. bottle glass
23	277°34'	17.5	98.41	KC	Plain white ironstone
24	276°14'	23.6	98.40	KG	Milk glass table glass, floral plate rim
25	275°09'	30.2	98.51	MM	Unidentified flat metal frag.
26	273°51'	23.4	98.42	KG	Amber m.m. bottle glass
				MG	Unidentified clear glass, nearly flat
27	272°12'	24.9	98.48	KG	Aqua m.m. bottle glass
				KG	Clear m.m. bottle glass
				KG	Milk glass canning seal lid frag.
				KC	Flow blue ironstone
				KC	Buff paste stoneware base, Bristol ext./Albany int.
28	272°16'	29.8	98.55	KG	Amber m.m. bottle glass
				KG	Clear m.m. bottle glass
29	271°25'	27.8	98.51	KG	Aqua m.m. bottle glass
				KG	Clear m.m. bottle glass
				KC	Plain white ironstone
				AG	Plate glass 0.09" thick
30	268°27'	27.5	98.50	KG	Amber m.m. bottle glass
				KG	Aqua m.m. bottle glass
31	267°52'	26.4	98.48	KC	Plain white ironstone, rim
32	267°10'	23.1	98.46	KG	Clear m.m. bottle glass base
				ZM	Auto part, rusted brake arm
33	265°09'	19.2	98.46	ZM	Metal tool fragment, possible hoe or shovel
				KC	Buff paste stoneware, Bristol slip int./ext.
34	266°51'	28.7	98.54	MP	Green plastic frag., discarded
35	265°51'	26.1	98.49	CB	Rubber shoe heel
36	265°09'	27.5	98.51	KC	Plain white ironstone
				KG	Clear m.m. bottle glass
37	262°39'	27.2	98.54	KG	4 pcs. clear m.m. bottle glass
				AM	Metal window pane divider
				KB	Bone, with machine saw marks
				KG	Aqua threaded glass jar rim
38	263°37'	26.1	98.52	KG	Clear m.m. bottle glass
39	264°14'	23.6	98.48	KG	Clear m.m. bottle glass

APPENDIX I Continued. Controlled Surface Collection Artifact Data.

Point and Bag #	Azimuth from 0.0	Distance (meters)	Arbit. Elev.	Group & Class	Artifact Description
40	261°27'	29.0	98.55	AC KC	White porcelain tile, 1" hexagon Plain white ironstone
41	261°51'	24.5	98.50	KC KG	Plain white ironstone, poss. saucer Milk glass canning seal lid
42	261°28'	23.8	98.49	KG KC	Milk glass canning seal lid frag. molded white ironstone rim
43	260°50'	22.6	98.50	KG	Clear m.m. square base of bottle
44	259°30'	11.8	98.45	AG KC KG KG	Plate glass 0.075" thick Brown/green decal ironstone Milk glass canning seal lid "...INED..." 3 pcs. clear m.m. bottle glass
45	254°41'	14.3	98.50	KC KC	Burned ironstone, plain white Plain white ironstone
46	259°19'	16.8	98.49	AG KC	Plate glass 0.087" thick Plain white ironstone
47	259°41'	21.4	98.50	KC	Ivory colored earthenware, blue glaze ext., lid
48	259°16'	22.2	98.50	KC	Ivory colored earthenware, white glaze int., blue glaze ext., cup or small bowl base
49	258°56'	27.0	98.53	AG KG	Plate glass 0.10" thick 3 pcs. clear m.m. bottle glass
50	256°48'	29.3	98.57	KG KC KC KC	Clear m.m. bottle glass Buff paste stoneware base, Bristol bottom, Bristol int. Blue sponged ironstone, rim Cup rim, plain white ironstone
51	255°56'	28.1	98.53	KC	molded rim, white ironstone
52	255°31'	27.4	98.54	KG	Amber m.m. bottle glass
53	257°11'	25.7	98.53	KG	Cobalt blue bottle glass
54	256°14'	23.2	98.50	KC	Plain white ironstone rim
55	249°52'	20.4	98.50	KG	Partial white m.m. glass container
56	253°06'	22.5	98.50	KG	Clear m.m. bottle glass
57	254°10'	24.1	98.51	KG	Clear m.m. bottle glass
58	255°19'	24.8	98.52	KC	Ivory colored earthenware, white glaze, with foot ring
59	254°05'	26.7	98.51	KC	Plain white ironstone, green backmark "...MADE IN JAPA..."
60	252°35'	27.8	98.54	KC KC	Hard paste porcelain, molded rim Plain white ironstone, with illegible black backmark

# APPENDIX I Continued. Controlled Surface Collection Artifact Data.

Point and Bag #	Azimuth from 0.0	Distance (meters)	Arbit. Elev.	Group & Class	Artifact Description
61	251°07'	26.4	98.53	KC	Plain white ironstone
				KC	molded white ironstone rim
				KG	Clear m.m. bottle glass
62	250°53'	23.6	98.50	AG	Plate glass 0.088" thick
63	247°03'	22.6	98.54	PP	cream colored plastic comb frag.
64	245°19'	19.9	98.52	KC	Plain white ironstone, one rim
65	247°21'	21.2	98.50	CP	Plastic 4 hole button 0.55" dia
66	247°54'	23.9	98.49	KC	2 pcs. plain white ironstone, one pc. w/foot ring
				KG	2 pcs. clear m.m. bottle glass
67	247°59'	26.5	98.51	KG	Milk glass canning seal lid "...MASON..."
68	248°40'	27.3	98.52	KG	Clear m.m. bottle glass
69	249°29'	30.0	98.58	KC	Hotel ware, green banded
				KG	Opaque molded table glass
				KG	Milk glass canning seal lid frag.
70	247°36'	30.3	98.58	KG	Amber m.m. bottle glass
71	247°09'	27.5	98.53	KC	Scalloped rim, white ironstone
				KG	Clear m.m. bottle neck
72	245°23'	27.6	98.52	KC	Blue transfer print ironstone
73	246°17'	25.9	98.55	KG	Clear m.m. bottle glass
				KC	Buff paste stoneware, churn lid frag., cream glaze on one side, unglazed opposite
74	243°40'	23.0	98.50	KC	Plain white ironstone, rim
				KG	Clear m.m. bottle glass
				KG	Clear m.m. bottle base
				KC	Blue ironstone molded pitcher handle
75	241°30'	21.1	98.49	CM	Brass military button w/eagle, 1.1" dia
				KC	Plain white soft paste porcelain
76	240°16'	22.7	98.50	KG	3 pcs. clear m.m. bottle glass
				KC	Plain white ironstone, foot ring
				KC	Gray paste stoneware, unglazed, blue painted in two bands
				KG	Milk glass canning seal lid frag. "...FOR MASON..."
77	242°00'	24.2	98.50	ZM	Hardware, 1.5" dia. washer
				KB	Curved tooth fragment (canine?)
				KG	2 pcs. aqua m.m. bottle glass
				KC	Plain white ironstone
				KG	Amber m.m. bottle glass, squared base



# APPENDIX I Continued. Controlled Surface Collection Artifact Data.

Point and Bag #	Azimuth from 0.0	Distance (meters)	Arbit. Elev.	Group & Class	Artifact Description
78	244°42'	29.8	98.53	ZM	Hardware, 21" iron strap w/ eye bolts
				AG	Plate glass 0.10" thick
				KG	2 pcs. amber m.m. bottle glass
				KG	Clear m.m. bottle glass
79	241°15'	12.4	98.45	KG	Milk glass table glass
80	228°52'	12.3	98.43	KC	Plain white ironstone
				KG	Clear m.m. bottle glass
				KG	Dark blue threaded rim bottle glass
81	216°12'	11.5	98.34	KC	Ivory colored earthenware, white glaze
82	220°02'	14.1	98.39	KC	molded blue ironstone
				KG	Milk glass table glass floral plate rim
				KC	Plain white ironstone
				ZM	Light bulb base
				RM	12 ga. shotgun shell base "Remington"
				KG	Clear m.m. bottle glass
				KG	Aqua m.m. bottle glass
				KG	Amber m.m. bottle glass
83	220°18'	15.9	98.43	KG	Painted soda bottle "Good"
84	227°50'	15.1	98.39	KC	Buff paste Stoneware, Bristol slip int./ext.
				KG	Clear m.m. bottle glass
				ZG	Auto safety glass 0.24" thick
85	226°14'	16.4	98.46	KC	Molded white ironstone rim
86	233°41'	17.1	98.52	KC	Plain white ironstone, illegible backmark
				KG	Small milk glass bottle base
				KG	Amber m.m. bottle glass
87	239°07'	19.2	98.48	KC	Plain white ironstone rim
88	236°07'	21.6	98.50	CB	Rubber shoe heel
				KC	Plain white ironstone, cup rim
89	237°17'	22.3	98.47	ZM	Hardware, 3" long hanging hook
90	235°28'	21.9	98.50	KC	Ivory colored earthenware, white glaze int./ blue glaze ext.
91	238°10'	24.1	98.50	ZP	Foam weather stripping, discarded
92	235°57'	23.7	98.52	KG	2 pcs. clear m.m. bottle glass
93	232°46'	23.7	98.47	KC	Plain white ironstone, foot ring
94	232°06'	22.8	98.47	KG	Milk glass canning seal lid frag "...AIN..."
				KC	Plain white ironstone

# APPENDIX I Continued. Controlled Surface Collection Artifact Data.

Point and Bag #	Azimuth from 0.0	Distance (meters)	Arbit. Elev.	Group & Class	Artifact Description
95	229°35'	21.7	98.53	KG AG KG KC	3 pcs. clear m.m. bottle glass Auto safety glass 0.20" thick Molded milk glass, table glass Plain white hard paste porcelain
96	230°12'	22.5	98.50	KC KG  KG	Plain white ironstone Milk glass canning seal lid frag., "... OR BALL MASO..." Milk glass canning seal lid frag.
97	229°40'	23.0	98.51	KC KG KG	Scalloped rim white ironstone 2 pcs. clear m.m. bottle glass Amber m.m. bottle glass
98	235°42'	33.5	98.48	KC  KG	Polychrome decal ironstone. alphabet bowl or mug, with "U V" Lt. purple table glass
99	224°03'	21.2	98.43	KG KC KG AG	Milk glass, table glass floral molded 2 pcs. scalloped rim white ironstone Blue m.m. bottle glass Plate glass 0.175" thick
100	221°04'	20.1	98.46	KC	Plain white ironstone, one foot ring
101	221°18'	18.3	98.41	KC KC KG	Buff paste stoneware, Bristol int./ext. Buff paste stoneware, Bristol int./ext., base Clear m.m. bottle glass
102	214°20'	17.2	98.37	KG KG  CB	Aqua m.m. bottle glass Milk glass canning seal lid frag., "...VINE..." Rubber shoe heel frag.
103	210°39'	15.9	98.36	MM KC	Unidentified metal Buff paste stoneware, Albany int./Bristol slip ext.
104	217°25'	18.3	98.38	KC	Buff paste stoneware, Bristol slip int./ext.
105	222°20'	24.1	98.48	KC KG KG	Buff paste stoneware, Bristol int./ext. Milk glass canning seal lid frag. Clear m.m. bottle glass
106	213°27'	20.4	98.38	KG	Painted soda bottle glass "DRINK..."
107	227°03'	35.1	98.38	KG KG KG	Solarized amethyst table glass Milk glass canning seal lid "...ASON JARS..." Clear m.m. bottle glass

APPENDIX I Continued. Controlled Surface Collection Artifact Data.

Point and Bag #	Azimuth from 0.0	Distance (meters)	Arbit. Elev.	Group & Class	Artifact Description
132	277°40'	12.8	98.44	KG	White table glass
133	273°01'	13.7	98.47	KC	Plain white ironstone
134	265°29'	13.7	98.43	KC	Plain white ironstone
				ZM	Hardware: rusted bracket
135	265°29'	24.6	98.49	AS	>1/2 category I brick "...C O S..."
136	253°41'	17.1	98.49	KG	Clear m.m. bottle glass
137	252°30'	17.8	98.50	KG	Clear m.m. bottle base, 1/2 pint liquor
				KC	Plain white ironstone
138	250°33'	14.5	98.50	KC	Plain white ironstone, plate rim
				KG	Clear m.m. bottle glass
139	242°30'	12.2	98.47	KC	Pink glazed ironstone, plate foot ring sherd
140	246°08'	28.9	98.52	AS	>1/2 category I brick "...& C..."
				KG	Clear m.m. table glass
				AG	Plate glass 0.10" thick
				KC	Pink glazed ironstone plate rim sherd
141	244°23'	30.2	98.55	AS	>1/2 category I brick "...S & Co..."
142	243°33'	31.4	98.54	AS	>1/2 brick category I "...S&Co"
143	244°41'	28.0	98.54	AS	1/2 brick category III
144	243°27'	28.4	98.52	KG	Amber m.m. bottle glass
				KC	Buff paste stoneware, Bristol ext./ Albany int., base fragment
				KC	Ivory colored earthenware, light blue glazed and plain white glazed
145	242°22'	27.3	98.55	AS	>1/2 brick, category I
				KG	Clear m.m. bottle glass
146	240°05'	27.2	98.54	KC	2 pcs. plain white ironstone, one rim
				KG	2 pcs. dark blue m.m. bottle glass
				KG	Clear threaded glass rim frag.
147	241°33'	28.7	98.55	AS	>1/2 brick, category I "OCS..."
				AM	Ferrous window pane divider
				KC	Plain white ironstone, foot ring
				KG	Clear table glass, saucer rim
				KG	Amber m.m. bottle glass base
148	240°38'	29.7	98.53	KG	Clear m.m. large jug base, with marks "...AS MFG" and "...MARK"
149	237°40'	31.5	98.49	AS	>1/2 brick, category I with "...Co..." mark
				KG	Solarized amethyst bottle base
150	232°37'	33.1	98.42	AS	1/2 brick, category I

# APPENDIX I Continued. Controlled Surface Collection Artifact Data.

<u>Point and Bag #</u>	<u>Azimuth from 0.0</u>	<u>Distance (meters)</u>	<u>Arbit. Elev.</u>	<u>Group &amp; Class</u>	<u>Artifact Description</u>
151	234°07'	32.9	98.47	KC	Buff paste stoneware, churn lid, unglazed upper, cream glazed lower side
152	235°21'	31.8	98.47	AS KC	>1/2 brick, category I with "...O..." mark Plain white ironstone
153	235°28'	26.7	98.48	KC	2 pcs. plain white ironstone
154	235°29'	25.6	98.47	KG KG KG KG KG KG KC	2 pcs. clear m.m. bottle glass 2 pcs. clear m.m. bottle glass Amber m.m. bottle glass Aqua m.m. bottle glass Clear m.m. smooth bottle neck Clear m.m. threaded bottle neck Plain white ironstone foot ring
155	233°41'	26.2	98.50	AS	>1/2 brick, category I
156	231°16'	26.4	98.45	AS KC	1/2 brick, category II "...A R..." Plain white ironstone rim
157	230°08'	25.0	98.43	KC	Plain white ironstone rim
158	223°17'	2.6	98.38	AG KG KG	Plate glass 0.082" thick Clear m.m. bottle glass Clear molded table glass
159	230°58'	5.9	98.39	KG KG	Clear m.m. bottle glass Milk glass m.m. bottle glass
160	211°07'	6.7	98.35	ZM KG KC	Spring 2.2" dia., not automotive Clear m.m. bottle glass Molded white ironstone, foot ring
161	198°25'	6.4	98.31	CB KC	Rubber shoe heel fragment Ivory colored earthenware, cream colored glaze, foot ring
162	197°38'	7.7	98.35	KC KG	Buff paste stoneware, unid. brown slip int./ext. 2 pcs. clear m.m. bottle glass
163	225°58'	9.5	98.43	KG KC	Clear m.m. bottle glass Plain white ironstone rim
164	210°18'	10.4	98.32	KG KG	Clear m.m. bottle glass Amber m.m. bottle glass
165	197°23'	10.8	98.33	KG KG	Clear m.m. bottle glass Milk m.m. bottle glass
166	198°24'	13.3	98.32	KG KG	Clear m.m. bottle glass Dark blue m.m. bottie partial lip
167	206°00'	11.4	98.34	KC	Plain white ironstone

# APPENDIX I Continued. Controlled Surface Collection Artifact Data.

Point and Bag #	Azimuth from 0.0	Distance (meters)	Arbit. Elev.	Group & Class	Artifact Description
168	204°15'	12.1	98.31	KG	Clear m.m. soda bottle glass
				KG	Milk m.m. bottle glass
				KC	Plain white ironstone
				ZG	Auto safety glass 0.245" thick
169	205°42'	12.7	98.35	AS	>1/2 brick category I, "...OCS&"
170	208°47'	12.9	98.35	KC	Molded white ironstone rim
171	211°52'	13.6	98.35	KG	Milk table glass
172	220°50'	13.0	98.41	KG	Milk glass canning seal lid frag "MA..."
				KG	Dark blue screw cap jar rim, 1.1 " dia
				KG	Clear m.m. bottle glass
173	218°02'	17.4	98.40	KC	Plain white ironstone
174	213°00'	16.2	98.38	KG	Aqua m.m. bottle glass
175	206°37'	16.0	98.36	KG	2 pcs. clear m.m. bottle glass
				KG	Milk table glass, rim
				KC	Buff paste stoneware, Albany/Bristol slip
176	201°10'	15.3	98.31	KG	Clear m.m. bottle glass
177	197°01'	14.6	98.31	AS	>1/2 brick category II, no marks legible
				KG	Clear m.m. table glass
				KG	Clear m.m. bottle glass
				KG	Lightly solarized clear m.m. bottle glass
178	206°20'	19.7	98.30	KG	Aqua m.m. bottle glass
179	204°32'	22.0	98.26	ZM	Auto part
				AG	Plate glass 0.077" thick
				KG	Milk glass canning seal lid frag.
180	194°54'	22.7	98.27	KG	Clear m.m. bottle glass
181	194°56'	19.8	98.29	MM	Unidentified ferrous object, 2.5"x2.5", flat
182	203°57'	23.5	98.28	KG	Clear m.m. bottle glass "...ER"
183	192°59'	25.5	98.27	ZM	Farm implement hardware
184	205°58'	25.9	98.30	KG	Amber m.m. bottle glass
185	212°21'	26.6	98.36	KG	Clear m.m. bottle glass, rectangular base
186	228°01'	33.8	98.40	KC	Buff paste stoneware base, Albany int./unglazed bottom
187	225°13'	33.2	98.38	KG	Aqua m.m. bottle glass
				KG	Amber m.m. bottle glass
				KC	Ivory colored earthenware, cream glaze
				ZM	Piece of tractor seat
188	212°57'	2.0	98.37	KG	2 pcs. clear m.m. bottle glass
189	214°16'	3.4	98.37	ZM	Ferrous farm implement hardware
190	257°43'	10.6	98.44	KG	2 pcs. aqua m.m. bottle glass

**APPENDIX I Continued. Controlled Surface Collection Artifact Data.**

<u>Point and Bag #</u>	<u>Azimuth from 0.0</u>	<u>Distance (meters)</u>	<u>Arbit. Elev.</u>	<u>Group &amp; Class</u>	<u>Artifact Description</u>
191	238°28'	13.6	98.48	KG	Clear table glass, possible bowl base
				KG	Aqua m.m. bottle glass, Mason jar rim
192	238°30'	14.7	98.47	KG	Blue m.m. bottle glass
193	230°13'	14.8	98.44	KG	Amber m.m. bottle glass
				ZM	Rusted iron bar
194	230°48'	17.3	98.51	CB	Rubber shoe heel
				CM	Metal jean button
				KG	Clear m.m. bottle glass
				KC	Plain white hard paste porcelain
195	239°13'	23.1	98.48	KC	Buff paste stoneware, Albany slip int./ext.
196	247°17'	25.0	98.53	AG	Plate glass 0.120" thick
				KG	Dark purple table glass
				KG	Aqua m.m. bottle glass
				KC	Buff paste stoneware, Bristol ext./ Albany int.
197	206°22'	15.4	98.35	KC	Plain white hard paste porcelain
				KG	Clear m.m. bottle glass
198	187°40'	15.2	98.25	KC	Buff paste stoneware, Bristol int./ext.
199	184°52'	23.5	98.21	KG	Clear m.m. bottle glass
200	219°03'	37.4	98.38	AS	Whole brick, category II with "LFB WXS" mark
				KC	Plain white ironstone
201	217°30'	36.0	98.35	KG	Clear m.m. bottle glass
				KC	Plain white ironstone rim
202	215°54'	34.2	98.34	KG	Clear m.m. bottle glass
203	212°22'	34.8	98.34	KC	Buff paste stoneware, unid. brown slip
				KC	Plain white ironstone, plate foot ring
204	209°53'	35.2	98.33	KG	Clear m.m. bottle glass
				KC	Brown/black banded soft paste porcelain
				KC	Black banded soft paste porcelain
205	209°11'	36.1	98.34	KG	Clear m.m. bottle glass
206	203°34'	33.4	98.34	KG	Clear m.m. bottle glass
207	208°54'	37.7	98.37	KG	Milk table glass, rim
				KC	Buff paste stoneware, Bristol ext./ Albany int.
208	206°57'	38.0	98.37	ZG	Auto headlight glass frag.
				KG	2 pcs. clear m.m. bottle glass
209	208°49'	41.0	98.38	KC	Plain white ironstone, with green backmark " VODREY...HINA"

# APPENDIX I Continued. Controlled Surface Collection Artifact Data.

Point and Bag #	Azimuth from 0.0	Distance (meters)	Arbit. Elev.	Group & Class	Artifact Description
210	198°45'	39.3	98.31	AS	Whole brick, category I
211	195°45'	38.9	98.29	KG	Clear molded table glass
212	196°58'	44.2	98.32	KG	Clear m.m. bottle glass, jar rim
213	202°00'	49.5	98.37	KG	Aqua m.m. bottle glass
214	197°27'	51.0	98.37	KC	Buff paste stoneware jug shoulder, Albany int, Bristol lower ext, Albany upper ext
215	196°33'	56.0	98.39	ZM	Light bulb base (Al)
216	195°13'	56.1	98.38	ZM	Ferrous crank or jack handle
217	195°55'	65.0	98.41	AS	1/2 brick, category II
218	100°44'	2.8	98.37	MM	Copper tubing soldered together
219	170°29'	13.1	98.24	KC	Plain white ironstone
220	159°46'	17.0	98.19	KG	Clear m.m. bottle glass
221	172°14'	22.0	98.19	KC	Ivory colored earthenware, cream glaze
222	165°46'	33.0	98.22	KC	Buff paste stoneware, Bristol int./ext.
223	161°36'	34.1	98.15	AS	Whole brick, category I with "OCS&Co" mark
224	162°35'	35.6	98.21	ZM CB	Ferrous plow bit Rubber shoe heel
225	164°23'	40.2	98.18	KG	Dark blue m.m. bottle base, elongated oval
226	164°18'	45.7	98.27	ZC	White porcelain electrical insulator "WP 22 USA"
227	158°25'	47.1	98.27	KG	Clear m.m. bottle glass
228	158°37'	45.6	98.28	AG	Plate glass 0.10" thick
229	162°22'	41.2	98.19	MM	Unidentified ferrous object
230	161°11'	41.4	98.21	KG KG ZG	Aqua m.m. table glass 2 pcs. clear m.m. bottle glass Auto safety glass 0.20" thick
231	158°38'	42.2	98.20	KG	Aqua m.m. soda bottle glass
232	150°01'	42.4	98.24	KG	Clear m.m. bottle glass
233	150°58'	40.8	98.19	ZG KG KG	Auto safety glass 0.264" thick Clear m.m. bottle glass Blue screw top bottle neck
234	156°54'	40.0	98.20	KG KG KG	3 pcs. clear m.m. bottle glass Aqua m.m. bottle glass Amber m.m. bottle glass
235	155°25'	40.9	98.21	KG KG	Green soda bottle glass Clear m.m. bottle glass
236	153°18'	35.0	98.18	ZM	Metal hanging scale part
237	153°34'	33.2	98.22	ZM	Farm implement hardware

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**APPENDIX I Continued. Controlled Surface Collection Artifact Data.**

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<u>Point and Bag #</u>	<u>Azimuth from 0.0</u>	<u>Distance (meters)</u>	<u>Arbit. Elev.</u>	<u>Group &amp; Class</u>	<u>Artifact Description</u>
238	181°09'	9.7	98.27	KG	Blue m.m. bottle glass
239	323°16'	36.0	98.26	KC	Hotelware, green banded

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APPENDIX 2: RESUMES OF KEY PROJECT PERSONNEL

**C. Andrew Buchner  
Garrow and Associates, Inc.**

**Education**

1984-B.A., Anthropology, Westminster College, Fulton, Missouri.

1989-M.A., Anthropology, Memphis State University, Memphis, Tennessee.

**Areas of Specialization**

Prehistoric Archaeology of Southeastern United States, Mississippi Period  
Ceramics in the Upper Yazoo Basin, West Tennessee Historical Archaeology,  
Archaic on the Eastern Highland Rim and Cultural Resource Management

**Professional Memberships**

Southeastern Archaeological Conference (Member)

Southern Anthropological Society (Member)

Alabama Archaeological Society (Member)

Arkansas Archaeological Society, Memphis Chapter (ex-VP)

Illinois Archaeological Survey (Member)

Mississippi Archaeological Association (Member)

**Professional Experience**

1989-Present     Archaeologist II, Garrow and Associates, Inc.

1989-1987     Field Director and Teaching Assistant, Memphis State  
University, Department of Anthropology

1983            Field School, Westminster College, Fulton, Missouri

**Field Experience**

Participation in over 30 anthropological and archaeological field projects in  
Alabama, Arkansas, Florida, Georgia, Mississippi, Missouri, Tennessee, Virginia,  
Puerto Rico and the U.S. Virgin Islands; including sites from the Paleoindian,  
Archaic, Woodland, Mississippian, Protohistoric, and Historic Periods (both  
urban and rural settings).

## Publications and Reports

- 1988 Preliminary Archaeological Investigations of the West Mounds (22Tu520), Tunica County Mississippi. *Mississippi Archaeology* 23(2):64-75. Junior author with David H. Dye., Memphis State University.
- 1989 *A Phase I Reconnaissance Survey of the Proposed Forced-Main Sewer Line from the Bluff Road to the Mississippi River, Tipton County, Tennessee.* A Report submitted to the City of Munford, Tennessee. Co-author with Charles H. McNutt, Sr., Memphis State University.
- 1990a *A Cultural Resources Reconnaissance Survey of the Proposed East Tennessee Natural Gas Pipeline Loop and Lateral Expansions in Trousdale, Putnam, Blount, and Greene Counties, Tennessee.* Report submitted to East Tennessee Natural Gas Co. by Garrow & Associates, Inc.
- 1990b *A Cultural Resources Intensive Survey of the Ensley Berm Construction Project, Memphis, Tennessee.* Report prepared for the U. S. Army Corps of Engineers by Garrow & Associates, Inc. Co-author with Guy G. Weaver.
- 1990c *A Cultural Resources Reconnaissance of the Proposed Azalea Ridge Recycling and Waste Management Facility ,Sections 5, 8, and 9, Mobile County, Alabama.* Report prepared for Waste Management, Inc. by Garrow & Associates, Inc. Co-author with William Turner.
- 1990d *Archaeological Testing at Site 3Ct263 within the Proposed Edmondson Wastewater Pond, Crittenden County, Arkansas.* Report prepared for the U.S. Army Corps of Engineers, Memphis District, by Garrow & Associates, Inc. and Cultural Resources Investigations, Inc., Memphis. Co-author with Guy G. Weaver.
- 1990e *A Literature Search and Sample Cultural Resources Survey of the Brady Ranch Tract, Okeechobee County, Florida.* Report submitted to Chambers Development Co. by Garrow & Associates, Inc.
- 1990f *A Cultural Resources Reconnaissance of the Proposed Rio Anton Ruiz Flood Control Project at Punta Santiago, Humacao, Puerto Rico.* Report submitted to the U. S. Army Corps of Engineers, Jacksonville District, by Garrow & Associates, Inc. Co-author with Mitchell R. Childress.

- 1990g *A Cultural Resources Intensive Survey of Proposed Levees and Boat Access Ditches at the Big Creek Duck Club, Monroe County, Arkansas.* Report prepared for the U. S. Army Corps of Engineers, Memphis District, by Garrow & Associates, Inc.
- 1990h *A Cultural Resources Survey of 10.23 Acres of Proposed Nashville Airport Runway 2C Expansion, Davidson County, Tennessee.* Report submitted to Aviation Planning Associates, Inc., by Garrow & Associates, Inc.
- 1990i *A Cultural Resources Reconnaissance and Literature and Records Search for the Proposed Expansion of the Talladega County Landfill, Alabama.* Report prepared for Waste Away Group Group, Inc., Montgomery by Garrow & Associates, Inc.
- 1990j *A Cultural Resources Reconnaissance and Literature and Records Search for the Proposed Pike County Landfill, Alabama.* Report prepared for Waste Away group Group, Inc., Montgomery by Garrow & Associates, Inc. Co-author with Steve C. Cole and Mitchell R. Childress.
- 1990k *A Cultural Resources Survey of the High Head Branch Watershed, Burke County, Georgia.* Report prepared for the Georgia Department of Natural Resources by Garrow & Associates, Inc.
- 1990l *A Cultural Resources Survey of the Proposed 278 Acre Park Bridge Development Tract, Fulton County, Georgia.* Report submitted to AMLI of Georgia, Inc., by Garrow & Associates, Inc., Atlanta.
- 1991a *Prehistoric Occupations on Upper Spring Creek: Phase II Archaeological Testing at 40PM85 and 40PM89, Putnam County, Tennessee.* Report submitted to East Tennessee Natural Gas Company, by Garrow & Associates, Inc. Co-author with Mitchell R. Childress.
- 1991b *Archaeological Investigations at 3SF332: An Early Mississippian and Tenant Period Site on Cutoff Bayou, St. Francis County, Arkansas.* Final report submitted to the U.S. Army Corps of Engineers, Memphis District, by Garrow & Associates, Inc. Senior author, with Mitchell R. Childress.
- 1991c *A Phase I Archaeological Reconnaissance Survey of the Smith Bend Development Tract, Rhea County, Tennessee.* Draft report submitted to Sirrine Environmental Consultants, Greenville, South Carolina by Garrow & Associates, Inc., Memphis. Senior author, with Mitchell R. Childress.

- 1991d *Phase I Archaeological Reconnaissance Survey of a 300 Acre Tract Located Adjacent to the Existing Charles City Landfill, Virginia*. Draft report submitted to Chambers Development Company, Inc., Smyrna, Georgia, by Garrow & Associates, Inc., Memphis, Tennessee. Senior author, with Patricia H. Baker and Jeffrey L. Holland.
- 1991e *A Phase I Cultural Resources Reconnaissance and Survey of Eight Proposed Pipe Storage Yards for East Tennessee Natural Gas in Trousdale, Putnam, Blount, Loudon, and Greene Counties, Tennessee*. Draft report submitted to East Tennessee Natural Gas Company, Knoxville, by Garrow & Associates, Inc., Memphis. Co-Author with Charles H. McNutt, Jr.
- 1991f *Additional Phase II Testing on Upper Spring Creek, Putnam County Tennessee: Archaeological Investigations at 40PM86, 40PM87, 40PM88, and 40PM90*. Draft report submitted to East Tennessee Natural Gas Company, Knoxville, by Garrow & Associates, Inc., Memphis. Junior Author with Mitchell R. Childress.
- 1991g *A Southeastern Ceremonial Complex Gorget from Putnam County, Tennessee*. *Tennessee Anthropological Association Newsletter* Vol. 16 (6):1-4. With Mitchell R. Childress.
- 1992a *Archaeological Survey and Architectural Assessment of Cultural Properties on the Proposed Pike County Landfill Site, Alabama*. Submitted to Golder Associates, Inc., and Waste Away Group, Inc., Atlanta, Georgia, by Garrow & Associates, Atlanta and Memphis. Senior author with John Hopkins and William McKinney.
- 1992b *Cultural Resources Investigations at the Berman Road Tract, Okeechobee County, Florida*. Submitted to Chambers Development Company, Inc., Atlanta, by Garrow & Associates, Inc., Atlanta and Memphis.

### Professional Papers Presented

- 1988 "Preliminary Archaeological Investigations of the West Mounds (22TU520), A late Mississippian/Protohistoric Site located in Tunica County, Mississippi." Southeastern Archaeological Conference, 50th Annual Meeting, New Orleans.
- 1989 "Ceramic Analysis at the West Mounds (22TU520), Tunica County, Mississippi." Southern Anthropological Society, 24th Annual Meeting, Memphis.
- 1990 "Mound A Excavations at the West Mounds (22TU520), Tunica County, Mississippi". Eleventh annual Mid-South Archaeological Conference, Pinson State Archaeological Park, Tennessee.
- 1991 "Phase II Testing in Putnam County." Presentation made at the Annual Meeting on Current Research Tennessee Archaeology, Vanderbilt University, Nashville, Tennessee. (Co-author with Mitchell R. Childress).

**Mitchell R. Childress**  
**Garrow & Associates, Inc.**

**Education**

- 1982 - B.A., Anthropology/Sociology, Rhodes College, Memphis, Tennessee (cum laude).
- 1983 - Graduate Studies, Anthropology, Washington State University, Pullman, Washington.
- 1989 - M.A., Anthropology, Memphis State University, Memphis, Tennessee.

**Areas of Specialization**

Ceramic and Lithic Analysis, Ethnoarchaeology, Prehistoric Archaeology of the Southeastern United States, Cultural Resource Management.

**Professional Service, Memberships, and Offices**

- 1987-Present: Member of the Arkansas Archaeological Society.
- 1987-1989: Vice President, Bluff City Chapter of the Arkansas Archaeological Society.
- 1990-Present: Associate, Current Anthropology.
- 1987-Present: Member of the Mid-South Association of Professional Anthropologists.
- 1987-Present: Member of the Society for American Archaeology.
- 1987-Present: Member of the Southeastern Archaeological Conference.
- 1987-Present: Member of the Tennessee Anthropological Association.
- 1991-Member, Program Committee for 1992 Annual Meeting of the Society for Applied Anthropology.

**Professional Experience**

- 1990-Present Currently employed by Garrow & Associates, Inc. serving as Branch Manager for the Memphis, Tennessee office and holding an Archaeologist II position. Project work has included serving as Principal Investigator or Field Director on archaeological survey and testing jobs in the southeastern U.S. and within the island of Puerto Rico. Adjunct Faculty, Department of Anthropology, Memphis State University.
- 1987-1990 Employed by Memphis State University as Curator of Education for C.H. Nash Museum, Department of Anthropology. I also held an Adjunct Faculty Position in the Department and taught introductory

courses in Archaeology.

- 1987      Excavation at Late Mississippian site of Chucalissa (40SY1), Shelby County, Tennessee.
- 1984-1987      Employed as instructor of mathematics and science at Grace St. Luke's Episcopal School, 246 South Belvedere, Memphis, Tennessee.
- 1986      Excavation at Late Mississippian site of Chucalissa (40SY1). Assisted in supervision of field school students enrolled in course administered through Memphis State University.
- 1985      Excavation at Chucalissa (40SY1).
- 1984      Excavation at Chucalissa (40SY1). Laboratory work at C.H. Nash Museum. Testing of suspected mound site near Reelfoot Lake, Obion County, Tennessee. Archaeological surface survey of areas in Tipton County, Tennessee.
- 1984      Archaeological survey and limited testing of land for the proposed Bartlett Corporate Park, Shelby County, Tennessee. Work performed through Anthropological Research Center, Memphis State University.
- 1983      Site survey work, testing and report writing concerning archaeological materials from Swan Bay (40HY66), Henry County, Tennessee.
- 1983      Archaeological survey and testing, New Madrid, Missouri. United States Army Corps of Engineers, Memphis District.
- 1982      Laboratory work at Memphis State University Anthropological Research Center. Involved in analysis of cultural materials collected during site survey work for the Tennessee Valley Authority at Little Bear Creek Reservoir, Franklin County, Alabama.
- 1981      Site survey work at Little Bear Creek Reservoir Management Project, Tennessee Valley Authority, Franklin County, Alabama. Field technician.
- 1980      Employed by Tennessee Department of Conservation, Division of Archaeology as a field technician at Fort San Fernando Historic Research Project, Memphis.

#### **Additional Experience and Volunteer Work**



- 1981 Four week intensive survey of archaeology and geology of the four corners area, Southwestern United States (Rhodes College).
- 1981 Assisted in limited testing at the DeSoto Park Mound site in downtown Memphis.
- 1983 Survey of lithic procurement sites in eastern Oregon and Washington (Washington State University).
- 1984 Assisted in the excavation of an historic well at the Gerber Annex/Falls Building site (40SY480) in downtown Memphis.
- 1984 Assisted in excavations at the historic Magevney House site in downtown Memphis.

#### **Publications**

- 1988 News from the Bluff City Chapter. *Field Notes, Newsletter of the Arkansas Archaeological Society* 223:4.
- 1990a Flaked Rhyolite Tools from Reynolds County, Missouri. *Missouri Archaeological Society Quarterly* 7(4):12-16.
- 1990b Mortuary Vessels and Comparative Ceramic Analysis: An Example from the Chucalissa Site. Manuscript on file, C.H. Nash Museum, Department of Anthropology, Memphis State University. [Submitted and recommended for publication in *Southeastern Archaeology* pending revisions].

#### **Presented Papers**

- 1989 An Assemblage of Vessels from the Chucalissa Site, Shelby County, Tennessee. Paper presented at the 46th Annual Meeting of the Southeastern Archaeological Conference, Tampa, Florida.
- 1990a A History of Excavations at Chucalissa. Presentation made at Cahokia Mounds Interpretive Center, Winter Lecture Series, Collinsville, Illinois.
- 1990b Unit 4 Mound Excavations at the Chucalissa Site, 1960-1967. Paper presented at the 11th Annual Meeting of the Mid-South Archaeological Conference, Pinson, Tennessee. (Senior author, with Camille Wharey)
- 1991 Phase II Testing in Putnam County. Presentation made at the Annual Meeting on Current Research in Tennessee Archaeology, Vanderbilt University, Nashville, Tennessee. (Senior author, with C. Andrew Buchner)

#### **Cultural Resources Management Reports**

- 1983 *Archaeological Investigations at the Swan Bay Site (40HY66), Henry*

- County, Tennessee. Anthropological Research Center, Department of Anthropology, Memphis State University. Submitted to the Tennessee Valley Authority, Norris, Tennessee. (Junior author, with Guy G. Weaver)
- 1984 *An Archaeological Reconnaissance for the Proposed Bartlett Corporate Park, Bartlett, Shelby County, Tennessee.* Anthropological Research Center, Department of Anthropology, Memphis State University. Submitted to the City of Bartlett. (Junior author, with Guy G. Weaver)
- 1990a *An Archaeological Survey of the Council Fire Development Tract, Hamilton County, Tennessee and Catoosa County, Georgia.* Garrow & Associates, Inc., Atlanta. Report submitted to Leonard Kinsey and Associates, Ltd., Chattanooga, Tennessee. (Senior author, with Patrick H. Garrow)
- 1990b *A Cultural Resource Reconnaissance Within the Proposed Flood Control Project Area on Río Grande de Manatí at Barceloneta, Puerto Rico.* Garrow & Associates, Inc., Atlanta. Report submitted to the U.S. Army Corps of Engineers, Jacksonville District, Jacksonville, Florida.
- 1990c *A Cultural Resources Reconnaissance of the Proposed Río Antón Ruiz Flood Control Project at Punta Santiago, Humacao, Puerto Rico.* Garrow & Associates, Inc., Memphis. Draft Report submitted to the U.S. Army Corps of Engineers, Jacksonville District, Jacksonville, Florida. (Junior author, with C. Andrew Buchner)
- 1990d *A Cultural Resource Reconnaissance for the Proposed Gaines Ferry Substation and Transmission Line Corridor, Hall County, Georgia.* Garrow & Associates, Inc., Atlanta. Report submitted to Oglethorpe Power Corporation, Tucker, Georgia.
- 1990e *A Cultural Resources Reconnaissance and Literature and Records Search for the Proposed Pike County Landfill, Alabama.* Garrow & Associates, Inc., Memphis. Report submitted to Waste Away Group, Inc., Montgomery, Alabama. (Third author, with S. C. Cole and C. A. Buchner)
- 1990f *Analysis and Interpretation of Artifact Collections from Four Archaeological Sites within the Country Club Gardens Permit Area, Crittenden County, Arkansas.* Garrow & Associates, Inc., Memphis. Report submitted to the U.S. Army Corps of Engineers, Memphis District, Memphis, Tennessee.
- 1991a *Prehistoric Occupations on Upper Spring Creek: Phase II Archaeological Testing at 40PM85 and 40PM89, Putnam County, Tennessee.* Garrow & Associates, Inc., Memphis. Report submitted to East Tennessee Natural Gas Company, Knoxville, Tennessee. (Senior author, with C. A. Buchner)

- 1991b *Archaeological Investigations at FTB3: An Early Mississippian and Tenant Period Site on Cutoff Bayou, St. Francis County, Arkansas*. Garrow & Associates, Inc., Memphis. Report submitted to the U.S. Army Corps of Engineers, Memphis District, Memphis, Tennessee. (Junior author, with C. A. Buchner)

#### Unpublished Manuscripts, Research Reports and Other Submissions

- 1983 The Hatley Farmstead and Cabin: Ethnoarchaeology of a Non-Structure. Research project report on file, Department of Anthropology, Washington State University, Pullman, Washington.
- 1988a Perspectives on Emerging Chiefdoms: A Comparative Analysis. Paper submitted for the Southern Anthropological Association Student Paper Competition, 23rd Meeting, Tampa, Florida. Honorable Mention. (Abstract contained in program)
- 1988b Choctaw Ball Racket Manufacture: An Ethnographic Example for Prehistory. Manuscript on file, Department of Anthropology, Memphis State University. [To be submitted to *Tennessee Anthropologist*].
- 1989 *Measurement and Analysis of Whole Vessels from the Chucalissa Site (40SY1)*. Final Practicum Report submitted in partial fulfillment of M.A. requirements, on file, Department of Anthropology, Memphis State University.